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ABSTRACT

Rutgers Upward Bound program participants were recruited from 16 New Jersey high schools upon completion of the tenth grade. Students with potential for achieving success in a two- or four-year college were selected, despite lack of appropriate educational background. Subjects of this longitudinal study were 345 volunteers who participated in the program between 1966 and 1976. All participants enrolled in a college preparatory high school program and were exposed to summer and school year programs. Meta-teaching in these programs emphasized attitudes, self-concept, academic skills, and study habits considered important in contributing to academic success. It was found that college success was significantly higher for Upward Bound participants than non-participants. High class rank at high school graduation was also associated with success in college. Furthermore, no significant differences were found between high or low achievement on the Scholastic Aptitude Test, and college success. Length of exposure to the program was not related to either academic success or enrollment in college. (GDC)

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RUTGERS
THE STATE UNIVERSITY
OF NEW JERSEY

a longitudinal study:

THE LONG-TERM IMPACT OF THE RUTGERS UPWARD BOUND PROGRAM ON ITS PARTICIPANTS

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FM006 533

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Earl V. Farrow

CHAPTER I: INTRODUCTION

On June 24, 1964, Rutgers--The State University, New Brunswick, New Jersey, began the Rutgers Educational Advancement Program (subsequently changed to Rutgers Educational Action Program), or REAP. This action marked the University's first effort to make its resources available to those members of the state's high school and college age population coming from economically and educationally impoverished backgrounds. Two years later, in June 1966, the Rutgers Upward Bound program began its operation as one component of REAP, with the basic goal of providing motivation and skill for promising disadvantaged high school students who would not normally attend college.

Context of the Problem

The 1960s witnessed the evolution of America's concern for the problems of the nation's poor and minority groups. During the same period, blacks and other minority poor began

to demand admission to all of society's institutions, focusing particular attention on education and such barriers to higher education as inadequate academic preparation, inequality of opportunity, and racial isolation.

In an attempt to meet the societal demands of the sixties, President Lyndon B. Johnson outlined the "War on Poverty" in his 1964 State of the Union Message. One aspect of the program concerned the problem of educating poor and minority groups. It was believed that if this primarily urban segment of the population received an education comparable to that provided for the white middle class, they would be better able to participate in the problem-solving processes central to the life of the cities and would eventually contribute more substantively to the general economy.

Compensatory education was designed to get underprivileged students ready for school or college, the major assumption being that once this was accomplished, the students would be sufficiently rehabilitated to join normal learners in the standard educational process. The exemplary Federal Compensatory Education programs are: Head Start, a preschool program designed to prepare the disadvantaged child for school by starting him at an earlier age; Follow Through, a comprehensive program designed for Head Start graduates entering elementary school; and Upward Bound, whose objectives were outlined in part in an introductory statement to the 1967-1968 Upward Bound guidelines by Sargent Shriver, Director of the Office of Economic Opportunity:

> One of America's greatest wastes occurs when capable young people who could succeed in college never attend because of psychological, social and physical conditions of poverty backgrounds. This waste is especially cruel when we remember that more than ever before, higher education holds the key to so many jobs in the future. No one knows how much talent is lost to the nation

because of poor performance during formative years of a youngster's education. Upward Bound is designed to cut into this waste and to see if substantial numbers of potentially successful youngsters can profit from a real chance at higher education.

The Upward Bound students involved in the Rutgers study are typically from poor areas of the inner city, products of high schools which are generally unable to cope with the educational problems created by the social and economic plight of many of their students. As a result, many of these educationally disadvantaged students have not developed their potentialities, and secondary school personnel have verified what was indicated by test scores--that students classified as disadvantaged never received the essential tools for successful education.

Without the unique educational intervention afforded by the Upward Bound program, many students who have potential, but have been labeled "disadvantaged," would not enter the academic curriculum of their high school and would neither graduate from high school nor enter college. Participants entering Upward Bound usually have a negative concept of themselves and are unable to see that higher education can be used as a mechanism to break the cycle of poverty in which their families have been caught for generations.

Faced with seemingly insurmountable social and environmental conditions, students from urban poverty areas have little desire to produce and compete in the mainstream of society. It is not enough simply to say that society deems education a necessary tool. Students must be given an environment that will help them justify to themselves the reasons for learning, and that will also help them define their role and their relationship to society. Once this opportunity for self-reflection, evaluation and examination has been made available to them,

students can confront the reality of their need to choose a particular career.

Problem

The purpose of this study is to examine the longterm impact of the Rutgers Upward Bound program on its participants. Particular attention will be given to the isolation of those variables that tend to serve as predictors of success for Upward Bound students entering college.

More specifically, the investigator proposes to analyze the following questions:

1. Is there a significant difference in the college success patterns among Rutgers Upward Bound participants and non-Upward Bound participants?

2. Do Rutgers Upward Bound participants who enter college with high scores on the Scholastic Aptitude Test (SAT) necessarily succeed in college to a more significant degree than those in Rutgers Upward Bound with low SAT scores?

3. Do Rutgers Upward Bound participants who rank high in their high school graduating class necessarily succeed in college to a more significant degree than low-ranking participants?

4. Do students with more exposure to the program enroll and succeed in college to a more significant degree than those with less exposure?

Review of the Literature

A review of the literature discussed below indicates that the many unanswered questions concerning Upward Bound can best be addressed by research determining how well the program is meeting its central goal of removing its enrollees from the ranks of poverty. Most of the research relating to Upward Bound covers the period between 1963 and 1969 and was conducted by the Greenleigh Association, Inc., in conjunction

with the United States Office of Economic Opportunity.

After 1969 no significant amount of research was reported in the literature until 1976 when the Research Triangle Institute released its final report entitled: A Study of the National Upward Bound and Talent Search Programs. This study was conducted between February 1974 and March 1976.

This section will deal with a review of the literature in the areas of retention in high school, college enrollment and retention, attitudinal changes, college enrollment and socioeconomic status, ability testing and college admissions, and previous Rutgers Upward Bound research.

Retention in High School

Hunt and Hardt (1968), in their investigation of grade point averages (GPA) and test scores, found no evidence of an increase in GPA among students who had participated in two summer Upward Bound programs. However, Upward Bound students proved less likely to drop out of high school and more likely to apply and eventually enroll in college than the other students in the control group. The authors also discovered that Upward Bound participants were "slightly below average" in academic achievement, when compared with a national sample of non-Upward Bound participants.

Cohen and Yonkers (1969) found that although the Upward Bound program had not changed the normal GPA pattern among students, the fact that 2% of the enrollees in 1965-1966 and 8% in 1966-1967 transferred to an academic curriculum gave evidence of rising motivation. This increase was also demonstrated by the difference in the high school dropout rate, which was 5% for Upward Bound students as compared with 35% for the low-income population in general, and 29% for the older siblings of Upward Bound students. Similarly, Hunt and Hardt (1967) in an earlier study reported that a somewhat higher

percentage (52.9) of the participants returning to the Upward Bound program in 1967 had transferred into college preparatory programs.

The United States Comptroller General's Report to Congress, Review of Economic Opportunity Programs (1969) revealed that 20 to 27% of the Upward Bound students in 1966 and 1967 attained an "A-B" average or better in their high school work prior to entering Upward Bound. According to their GPA, Upward Bound students were not underachievers. However, the report also noted that the achievement of high averages was not in itself conclusive and that students might have been the victims of grade inflation and the grades obtained reflected more than their actual academic accomplishment. This study, based on data gathered by the American College Test (ACT) battery, which is designed to measure college potential, revealed that only 14% of the Upward Bound students scored in the middle and top quartiles, compared with 49% for the national average.

Burkheimer (1976) concluded that "There is, however, little evidence to indicate that the Upward Bound program is instrumental in increasing high school retention among participants." An examination of the high school completion rates for Upward Bound and non-Upward Bound participants, regardless of grade level considered, indicates that the continuance rates for both groups were quite high, ranging from 93 to 98%.

College Enrollment and Retention

In the same report the Comptroller General compared the college enrollment of Upward Bound students in two- and four-year colleges with older siblings and with the national student population. His findings showed that the Upward Bound enrollment was 79% compared with 20% for older siblings, and 40% for the national student population.

Researching college enrollment and persistence in college, Shea (1968) revealed that

in the first possible semester of college enrollment by Upward Bound students, 80% enrolled in college and another 2% enrolled at some time during the next two years.

Alumni of the 1965 Upward Bound program showed a persistence rate of 60% through five semesters in college, while 67% of the students entering in the Fall of 1966 only remained through three semesters. Shea attributes the less favorable persistence rate of the latter class to a more liberal recruiting policy, which led to the admission of greater numbers of high-risk students.

The 1966 Upward Bound alumni showed only a slightly higher persistence rate through three semesters of study than the sample of non-Upward Bound students with whom they were compared. As a result of a study of eleven programs, Gardenshire (1968) reported that the 1965 Bridge Class (students who remained in the Upward Bound program the summer after graduation from high school) had a matriculation rate of 80.5%. However, the 1966 class, according to a study of twenty-nine programs, did slightly better, with an 82.1% rate of matriculation. Retention rates through June 1968 were 76.9% for the 1965 Bridge Group and 82.4% for the 1966 class.

In general, a review of the literature revealed that retention rates for sample Upward Bound students in college during the 1965, 1966, and 1967 sessions were equal to or higher than those of the national population; it was therefore assumed that their graduation rates would compare favorably with the national average.

Although Levitan (1968) pointed out that the record of college admission and retention of Upward Bound graduates was outstanding, he cast doubts on these achievements, especially those pertaining to enrollment, by observing that 45% of all Upward Bound students attended colleges and universities which sponsor Upward Bound programs and are generally committed to the admission of Upward Bound graduates. Also,

many Upward Bound alumni attend junior colleges and four-year colleges, which have flexible admission policies. Levitan also expressed doubts as to whether Upward Bound could succeed in its effort to persuade participating institutions to adopt admission standards more relevant to disadvantaged youth and to help develop new curricula and teaching methods. Levitan expressed the opinion that the Upward Bound program, composed of 26,000 students, was too small to generate change on that scale.

In his 1974 report to Congress, The Comptroller General of the United States disclosed that an examination of the relationship between the students' time in the program and the extent to which they enrolled and succeeded in college indicated that though the program had increased the motivation of students to enroll in college, it had not adequately improved their academic skills. Also cited were the following statistics concerning Upward Bound programs since 1965:

1. 29.6 percent of the participants dropped out of Upward Bound before completing the program.

2. 20.9 percent completed the Upward Bound program but did not enroll in college--current status unknown.

3. 19.8 percent completed Upward Bound, enrolled in college, then dropped out--current status unknown.

4. 28.3 percent who completed Upward Bound are still enrolled in college.

5. 1.4 percent completed Upward Bound and graduated from two or four year colleges.

Burkheimor (1969) concluded that:

The difference in postsecondary education (PSE) enrollment rates between the Upward

Bound and comparison students were found to be significantly in favor of Upward Bound. Among high school graduates, less than half of the comparison students entered PSE as compared to almost three fourths of the Upward Bound participants. The findings of this study further indicate that (1) Upward Bound participation is positively related to immediate entry into postsecondary education, and (2) a majority of the Upward Bound participants entering PSE apply to and enter four year institutions. About 75 percent enrolled in four-year colleges or universities and about 20 percent entered two-year junior or community colleges. The remaining students entered vocational, trade, or other schools. Comparable figures for the entering comparison students were about 45, 30, and 25 percent, respectively.

On the other hand, Spurlock (1974) concluded that Upward Bound, along with other educational opportunity programs, pioneered concepts in educating students with non-traditional qualifications, and that many of the minority enrollment increases of the late sixties could be attributed to these programs.

Burkheimer (1976) concluded that "there is statistical evidence that among high school graduates PSE entry rate is positively related to length of participation in the Upward Bound Program."

Although the aforementioned study did not directly and rigorously evaluate whether or not the Upward Bound program was successful in generating skills and motivation necessary for success beyond high school, an indirect evaluation was conducted. Specifically examined were changes that occurred in: high school academic measures from ninth grade to current grade (grade point averages, proportion of academic credits taken, and academic credits passed); aspirations and expectations for postsecondary

education. The findings indicate the following:

> There is no support for a relationship between Upward Bound participation and changes in academic factors. There is evidence, however, that the greater proportion of Upward Bound participants planned and expected to attend and complete PSE. There is evidence to support the hypothesis that the Upward Bound program is facilitating actions taken by students in preparation for PSE, including application.

Attitudinal Changes

Studies by Hunt and Hardt (1967b) and by Shea (1968) showed a positive change in attitudes in almost all primary change measures (including motivation for college, internal personal flexibility, self-esteem, internal control, future orientation) and retention of the changes over the period 1966 to 1968.

Shea (1968) compared presummer and post-summer questionnaire data on 1,268 Upward Bound participants. The questionnaire--designed to determine changes in academic interest, academic ability, mathematics interest, self-esteem, initiative, ability to get along with others, ideal education, ideal occupation, expected education, and expected occupation--revealed an increase on nine out of ten of these scales. Only "ideal education," which measured extremely high at the beginning, showed no increase. It would appear from these data that the Upward Bound program has a positive effect on students' attitudes, feelings about themselves, and their motivational levels.

College Enrollment and Socioeconomic Status

An examination of data presented by the U.S. Department of Health, Education, and Welfare (1974) indicated that in 1971-1972 approximately five million students enrolled in the colleges and universities as full-time

undergraduates. A closer examination of college enrollment data further indicated a large disparity in attendance between low-income and high-income students, with data published by the U.S. Bureau of the Census (1972) showing that while 18.4% of the families in the United States in 1971 had incomes below $5,000, only 8% of the students in college came from such families. Approximately 25% of the families are in the $15,000-plus range, providing approximately 38% of the college population.

Crossland (1971) analyzed the aforementioned census data as it related to male minorities, concluding that they comprised only 6.8% of the estimated total higher education enrollment in the Fall of 1970. This finding is significant in that it again indicates that the minorities, representing the bulk of the low-income families, tend not to be enrolled in college. Although some researchers have suggested that the discrepancies in college enrollment among high- and low-income students are a function of ability rather than socioeconomic status (SES), Morris and Katz (1970) found that among male high school graduates, those in the top socioeconomic quarters were almost three times more likely to enroll in college than those in the lower socioenonomic quarters. Among female high school graduates, the college prospects for the low-ability rich were three times greater than those of low-ability poor.

A review of the data in Sewell's (1971) longitudinal study, conducted during the 1970s using approximately 9,000 Wisconsin high school graduates, concluded:

> Among the lowest fourth of the ability distribution, those in the highest SES category have 2.5 advantage over those in the lowest SES category. For students in the highest ability fourth, the chances for continuing their schooling are 1.5 times greater if they are from the highest rather than the lowest SES category. Similarly,

> in the lowest ability fourth, the rate of college attendance is four times greater for the highest SES group than for the lowest SES group. Among the top quarter of students in ability, a student from the lowest SES category is about half as likely to attend college as a student from the highest SES category. A similar pattern holds for the chances of graduating from college, where corresponding ratios range from 9 to 1 among low ability students, and 2 to 1 among high ability students. (pp. 795-796)

In another study, Sewell (1967) concluded that a student's SES and intelligence directly affect whether or not he will plan a college education, attend college, and graduate. Kohrs (1969) concluded that youth of low SES experience "a feeling of powerlessness to control their lives." Consequently, they are frequently characterized by poor educational achievement and lack of positive vocational development.

These and similar studies emphasize the lack of equal educational opportunity for the lower socioeconomic student. Even with free tuition and free access to institutions of higher education, it becomes extremely difficult to break out of the poverty cycle when attendance at college may result in the possible loss of public assistance income to a family while the cost of living expenses for the student increases. Low-income youth must be relieved of constant family economic pressures before all but the most exceptional can perform well in school.

Ability Testing and College Admissions

Traditionally, colleges and universities have relied very heavily for admission purposes on the scores obtained by applicants on the Scholastic Aptitude Test and the national American College Test assessment (ACT). Angoff (1974), however, pointed out that the principles of the use and interpretation of

the Scholastic Aptitude Test (SAT) scores, which are frequently communicated to counselors, admission officers, and educators, are occasionally overlooked, with the consequence that SAT scores may be used in inappropriate ways. He offered several points to remember about the SAT:

> (1) Although test scores are good predictors of performance in college, they are not perfect predictors. Students with high scores sometimes do worse in college than expected. Similarly, students with low scores (e.g., so called "high risk students") sometimes do better than expected.
>
> (2) As useful as they are, test scores should never be used in isolation but should be considered along with the high school record (which by itself is usually a better predictor than test scores alone; both together are better then either alone). Consistent with institutional policies and purposes, they should be used along with reliable and objective evidence of motivation and industriousness, creativity and imagination, leadership ability, and involvement in useful extra-curricular activities, and should be considered against the student's socioeconomic background and social obstacles and physical demands with which the student may nave to cope in reaching his present educational level.
>
> (3) Tests like the SAT and the Achievement Test measure certain characteristics basic to academic success in college, certainly not all--and there are other characteristics which we cannot measure easily that may be at least as important as scores on the test.
>
> (4) SAT scores do not pretend to measure or predict success in life. (p. 5)

In recent years many questions have been raised concerning the appropriateness of conventional tests in measuring the abilities of the disadvantaged and culturally different student. In a summary of the literature by Davis (1972), the following conclusions were reached:

1. At the beginning of college training, Negroes tend to score significantly lower on scholastic aptitude tests than whites.

2. Published studies of the ability of the SAT to predict grades of black students in predominantly Negro colleges, however, show that the SAT is as valid in this situation as it is for whites in a predominantly white institution.

3. Although relatively few studies have been done on the validity of the SAT to predict grades of black students in integrated colleges, the available evidence supports the conclusion of no difference in the level of predictive validity of the SAT for blacks vs. whites in such institutions; also, if white-based prediction formulas were applied to blacks, these students as a group appear to perform below the prediction.

4. If one attempts to make a case for bias in academic testing based on the fact that certain subgroups of the population make lower scores than others, the evidence points to the inadequacies as cultural rather than biological.

Kendrick (1968) estimated that not more than 15 percent and perhaps as few as 10 percent of Negro high school seniors would score 400 or more on the verbal section of SAT (Scholastic Aptitude Test of CEEB). Only 1 or 2 percent would be likely to score 500 or more.

Flaugher (1970) cited a review of the literature on this subject by Kendrick and Thomas (1970) in which a number of studies are contained: Boney (1966); Hills, Klock,

and Lewis (1963); Roberts (1962, 1966); Stanley and Porter (1967); Olsen (1957); Cleary (1968); Morgan (1968); Thomas and Stanley (1969); Munday (1965); McKelpin (1965); Funches (1967); Perlberg (1967); and Peterson (1968). All these studies have involved the SAT both separately and in combination with high school grades and the general finding is that there is no evidence of reduced predictive validity for blacks. Flaugher noted that the test scores predicted as well for blacks as whites, and that in most instances they provide a better estimate of performance in college than do high school grades--a finding that may reflect the kind of secondary schools that as recently as a few years ago most blacks attended.

Munday and Davis (1974) also found adult accomplishments to be uncorrelated with academic talent, including test scores, high school grades, and college grades; however, adult accomplishments were related to comparable high school non-academic accomplishments.

The aptitude tests mentioned earlier and other standardized ability and achievement tests used for admission purposes are often said to be biased against, and thus inappropriate for, children belonging to disadvantaged racial and ethnic minorities. Green (1972) suggested that this bias has two possible sources: (1) it may originate in the preconceptions and thought patterns of the test writer, and (2) it may result from the customary item tryout and selection procedures used in test construction.

According to Eells et al. (1951), the first serious attempt to test items for bias was led by Allison Davis and his colleagues some twenty years ago. They examined several existing group intelligence tests and the items in them in an attempt to determine the factors built into the test which related to differences in performance between cultural groups. They concluded: "Variations in opportunity for

familiar cultural words, objects, or processes required for answering the test items seem . . . the most adequate general explanation."

Other studies supporting this view, such as the work of Lesser, Fifer, and Clark (1965), concluded that patterns of ability are different for different ethnic groups. They also noted that within any one ethnic group, quantitative differences result from socio-economic status, while patterns for SES groups were very similar. Such data implied that any test measuring several abilities, as most ability tests do, is automatically stacking the cards against one ethnic group or the other.

Studies undertaken by Cardall and Coffman (1964), Cleary and Hilton (1968), and Angoff and Ford (1971) which examined text items rather than the whole test for bias revealed statistically significant items by racial interaction in the College Entrance Examination Board aptitude test which they used (SAT and PSAT).

A few studies also produced evidence that tests appear to over-predict the performance of lower-class and Negro students in contrast to middle-class and white students (Hewer, 1965; Stanley & Porter, 1967; Cleary, 1968; Davis & Temp, 1971). A report in the New York Times (1973) seems to bear this out:

> The best possible score on any of the various College Board Entrance Examinations is 800, and usually it takes scores well above 500 to get into selective institutions. Among the students being graduated today from such an institution as Macalester College in St. Paul, Minnesota, are two men who had College Board scores in the low 300's and 400's. One has been accepted to law school at Stanford, Indiana, and Iowa; the other has had job offers at three large newspapers. Both are Black. (p. E-11)

Miller and O'conner (1969) concluded that the Achiever Personality Scale predicts college grades about as well as the typical academic ability test. Furthermore, scores from the Achiever Personality Scale do not correlate with scores from the ability tests; that is, the scale measures something important in academic success not measured by ability tests. In short, the Achiever Personality Scale is a good indicator of academic ability and conscientiousness.

Holland (1959) reported that the California Personality Inventory yielded predictive validity significantly superior to the Scholastic Aptitude Test Scores or grade point averages for the National Merit Scholarship winners.

Summary of Previous Rutgers Upward Bound Research

In 1967, the Rutgers Upward Bound program was one of 214 Upward Bound programs throughout the United States and its possessions and one of twenty-one "target" programs randomly selected for intensive study. Data was secured concerning selected biographical characteristics and primary change measures of attitude on Upward Bound students such as self-esteem, self-responsibility, and alienation. Additional measures of motivation for such goals as college entrance and academic achievement were obtained from Rutgers Upward participants, and then compared with a national Upward Bound sample and a sample of "typical" high school students.

The biographical data represent the responses based on the self-reports of students. The percentages reported for Rutgers Upward Bound (REAP Upward Bound) include all students in the program in 1968 (n = 145). Percentages for the national Upward Bound are based on a 10% random sample of 18,530 Upward Bound students (n = 1,853) responding to a four-page biographical questionaire. The comparison data for United States high school students were reported

in a Project Talent publication, The American High School Student.

Biographical Characteristics

The Rutgers Upward Bound program enrolled a substantially higher proportion of black youngsters (80%) than is represented in Upward Bound programs nationally (52%) or in the northeastern United States (48%).

The percentage of black youngsters represented in Upward Bound programs ranges from a high of 86% in southeastern states to a low of 24% in north central states.

Beyond endorsing "quality integrated education," Upward Bound Policy Guidelines prescribe no student composition by race, ethnic origin, or sex. The Rutgers Upward Bound student body was formed by recommendations from (1) high school guidance counselors, (2) our present or former Upward Bound students, (3) community action agencies, (4) Upward Bound teachers, and (5) permanent Upward Bound central staff. Therefore, Rutgers Upward Bound reflected the recommendations and needs of fourteen high schools in the cities of New Jersey.

Six percent of the students were of Puerto Rican background, as against the national composition of 6%. As one would expect, the Upward Bound program in the northeast averaged less than 1% of Mexican-American students compared to 18% in projects in the Southwest and West.

What were the aspirations of Upward Bound students for schooling? All students came from public high schools in New Jersey, nine out of ten from schools with a student population of over 1,000.

Ninety-eight percent of Rutgers Upward Bound students wished to go on to formal post-high school education (business or technical school, junior colleges, four-year colleges, or graduate schools). This estimate compared

favorably with the desire of Upward Bound students nationally (94%) and Upward Bound students in the northeastern United States (95%) (see Appendix A, Table A1).

Expectations as to the extent to which students believe that they will realistically attain their aspiration are indicated in Appendix A, Table A2. Eighty-nine percent of Rutgers Upward Bound students believed they would make it to college, compared with 76% nationally and 82% in the northeastern United States.

Does family background make a difference? Very few Upward Bound students have parents with first-hand experience as college students or graduates. Less than half the parents graduated from high school, and in line with the national pattern, mothers graduated from high school at a far greater rate than fathers (see Appendix A, Table A3).

Most Rutgers Upward Bound students have older brothers and/or sisters. Appendix A, Table A4 indicates that it is almost equally probable that a student's older sibling either dropped out of high school before graduating or went on to business, technical, or college education.

Although Rutgers Upward Bound family income ($3,900) was higher than the 1968 national average ($3,401), it was lower than the northeastern regional average ($4,350). Appendix A, Table A indicates that while the average Upward Bound income in the northeast has remained approximately the same over the past two years, the national and Rutgers average is lower.

The incomes reported were based upon the self-reports of families and student's subsequent estimations. Two out of every three students claimed to have relatively certain knowledge of their family's income.

The 1967 Assessment of REAP Upward Bound (Lang, 1967) reported that the Rutgers program reflected the national Upward Bound pattern, with the students coming from larger families than high school students in general. Appendix A, Table 6 shows the same pattern continuing over a two-year period.

The probability that a Rutgers Upward Bound student resides with both parents is only one-half that of the typical United States high school student, and the potential maternal influence upon Rutgers Upward Bound students is even greater than that which was reported in the 1967 Assessment of REAP Upward Bound.

Parents of Upward Bound students, in general, and Rutgers Upward Bound students, in particular, have displayed extremely positive attitudes toward the program. In 1968, while parents' favorable feelings declined slightly from the 1967 high level, students reported that Upward Bound was gaining increasing favor among their friends. Appendix A, Table A7 contains a two-year summary.

Primary Change Measures

The effectiveness of the program depends on the expected improvement of such primary change measures of attitude as self-esteem, self-responsibility, alienation, and additional measures of motivation related to college and general achievement.

The 1967 Assessment of REAP Upward Bound, which evaluated the impact of both the 1966 and 1967 summer programs and the Academic Year Phase Program at Rutgers, reported changes for Rutgers Upward Bound and the twenty national "target" programs on the following nine measures: (1) importance of college graduation, (2) possibility of college graduation, (3) self-evaluation of intelligence, (4) motivation for college, (5) interpersonal flexibility, (6) self-esteem, (7) internal control, (8) future orientation, and (9) non-alienation.

In summarizing the results for Rutgers Upward Bound, it was reported that at the end of the summer, of the nine primary change measures, eight showed a significant increase beyond $p < .01$ and two beyond $p < .05$. The exception was future orientation.

During the following academic year, of the eight measures that had increased during the summer, five decreased: (1) importance of college, (2) possibility of college graduation, (3) self-evaluation of intelligence, (4) internal control, and (5) non-alienation. The decrease was significant ($p < .01$) for only measures one and two and only one showed a decrease below the original beginning of the summer level.

Academic Achievement

Grade point average. Each Upward Bound student was matched in his high school with a student of the same sex, age, and equal or nearly equal grade point average (GPA). The teacher or guidance counselor making the selection was urged to identify a student who was as "similar as possible" to the Upward Bound student.

The GPA was recorded for both the control and Upward Bound groups in June and the following February. Appendix A, Table A8 illustrates the changes in GPA for REAP Upward Bound and control students compared to the mean averages of the twenty target Upward Bound programs that reported GPA's.

As the table indicates, not only is the GPA trend for the twenty target programs downward but the decrease for Upward Bound students is greater than for the control students.

In contrast, the differences were significantly positive for REAP Upward Bound which was surpassed by only one of the other nineteen programs.

The national pattern of reverting to old patterns of academic performance was expected to continue as students returned to their homes and former schools.

The REAP Upward Bound pattern of continued academic growth was certainly atypical and unexpected based upon previous estimates of the effects of similar programs nationally.

In terms of the level of "risk" of the REAP Upward Bound student, it it interesting to note, in Appendix A, Table A8, that the June GPA of 1.88 is much lower than the GPA of 2.19 for the twenty programs. The GPA of REAP Upward Bound ranks fifteenth. By this criteria, Reap Upward Bound students represented, in a sense, academically "high-risk" students.

These students further increased their "risk" by enrolling in a greater number of academic courses in high school after the summer period, as opposed to their counterparts in the control group.

The fact that over 70% of those students who graduated from the REAP Upward Bound program went on to post-secondary education clearly seems to support part of the primary objective of Upward Bound "to generate the skills and motivation for inadequately prepared secondary school students from low-income backgrounds for success in college."

How successfully these students fared in college is currently being studied and will be assessed in future reports.

Dropout rate. One of the effects of national Upward Bound programs has been to reduce the number of participants dropping out of school.

It was reported that the data for the dropout rate of the control students matched with REAP Upward Bound students were incomplete because some high schools removed the records

on these students from their files. However, the 4% dropout rate of REAP Upward Bound students was estimated to be much less than the conservative dropout rates for the communities that REAP Upward Bound serves (Newark, New Brunswick, Camden, etc.).

Post-secondary school educational plans. Appendix A, Table A9 compares the educational plans of REAP Upward Bound students to norms based upon a large national sampling of high school seniors.

The sum of responses of C, D, E, and F indicates that compared to the national sample, REAP Upward Bound students thought they were much more likely to continue their education beyond secondary school.

Program Climate

Students rated their program's climate in eight areas on a Program Climate Questionnaire (PQC). Appendix A, Table A10 presents the eight areas ranked in order of significance by the REAP Upward Bound students. The rank of REAP Upward Bound in relation to the other twenty target programs, and the existence of any differences between it and the typical target program, are also noted.

The research discussed in this section covers the adacemic years 1966-1967 and 1967-1968.

Statement of the Hypotheses

Based on the review of the literature, the following hypotheses will be made for those students selected for participation in the Upward Bound program during the period 1966-1975.

1. Participants in the Rutgers Upward Bound succeed in college to a more significant degree than will non-participants.

Rationale--The Upward Bound Program rejects many of education's traditional values and

practices and encourages students to look at themselves and the world in a different way. Fantini and Weinstein (1968) attributed the academic success of Upward Bound students, in part, to the fact that Upward Bound and similar programs are free to use whatever materials and whatever teaching methods they think will excite their students. A case study reported by Silberman (1968) supported some of the previous stated conclusions:

> A Black student does poorly in a Northern high school for three years, when he expresses interest in college, his guidance counselor assures him that he is not "college material." Through the intercession of some white friends, and over the objection of his guidance counselor, he is admitted into the federally financed Upward Bound program at a nearby college, which provides an intensive remedial program during the summer, and special tutoring during his senior year. His grades shot up so rapidly that the Upward Bound official recommended him for a special Transitional Year program at Yale University, designed to give "underachieving students" with high potential the academic skill and self-confidence they need to realize their potential. The counselor begrudgingly supplies the necessary transcripts, after remarking to the boy, "What, you at Yale? Don't make me laugh." The student was selected along with sixty other students from among 500 applicants. (pp. 80-81)

Independent Variable--Participation versus non-participation.

Dependent Variable--Success in college.

Control Variable--Aptitude, socio-economic status, sex.

2. Among Rutgers Upward Bound participants enrolled in college, those who achieved high class rank upon graduation from high school succeeded in college to a more significant degree than those with low class rank.

Rationale--Astin (1972) examined variables that predicted the cumulative grade point averages (GAP) for students involved in special programs, and concluded that high school grades were the best predictors of college grades.

Independent Variable--High class rank versus low class rank.

Dependent Variable--Success in college.

3. There is no significant difference in college success for Rutgers Upward Bound participants who enroll with high SAT scores and those enrolling with low SAT scores.

Rationale--Bowers (1970) compared the admission test scores and the college grade point averages of disadvantaged students with those of regularly admitted students and concluded that their predictive validities, though positive, were low. Astin (1972) pointed out that even though high school grades and admission test scores are modestly successful in predicting college grade point average, and academic progress, they do not necessarily reveal a person's potential for being influenced by the college experience. Gordon and Wilkerson (1966) found that current tests rarely measure academic potential. Henderson (1968) maintained that standardized tests discriminate against minority students insofar as the expectations of those who who devise such examinations are biased. Williams (1969) stated that many disadvantaged students have characteristics that attest to their educability, including a willingness to accept responsibility, a positive self-image, ability for creative thinking, special talents, motivation to improve their life situation,

and persistence. Astin's (1968) data showed that test scores have only limited predictive value with respect to a student's chances of dropping out of college; this supported the notions of Egerton (1968) that the criteria used in admitting the disadvantaged are more stringent than necessary, and that more flexible admission standards criteria could be introduced without risking higher attrition rates.

Independent Variable--High SAT scores versus low SAT scores.

Dependent Variable--Success in college.

4. Rutgers Upward Bound participants with more exposure to the program (measured in months of participation) will enroll in college to a more significant degree than those Rutgers Upward Bound participants with less exposure.

Independent Variable--Exposure to Rutgers Upward Bound.

Dependent Variable--Number of participants enrolling in college.

5. Rutgers Upward Bound participants with more exposure to the program (measured in months of participation) will demonstrate success in college to a more significant degree than those Rutgers Upward Bound participants with less exposure.

Rationale--(Hypotheses 4 and 5.) The major objective of the national Upward Bound program is to provide academic skills and motivation necessary for success in college. It is generally recognized that the extent to which the Upward Bound program increases the academic skills and motivation needed for success is a better measure of program effectiveness than college admission, retention, and graduation rates. However, both nationally and at the Rutgers Upward Bound program, empirical pretest and posttest

data on the academic achievement skills of all students are not available. The lack of adequate information on the extent to which the Rutgers program increased academic readiness has necessitated the use of retention and graduation data in college as a proxy measure of Upward Bound's effectiveness in this area. Enrollment data were used as a proxy measure of motivation.

In a 1974 report to the Congress, the Comptroller General revealed that in a review of fifteen Upward Bound programs in the southeast, the statistical test indicated that the programs had succeeded significantly in motivating participants to enroll in college. However, the association between exposure to the program and college retention was insignificant; those with more exposure to the program were not succeeding at significantly higher rates than those with less exposure.

Independent Variable--Exposure to Rutgers Upward Bound.

Dependent Variable--Success in college.

Operational Definitions

This section provides operational definitions for the independent and dependent variables.

College enrollment. The registration for college courses at a given institution.

High class rank. Participants ranking 50% or above in their graduating class. All participants ranking below 50% are considered as having low class rank.

High SAT scores. Participants who score above the mean score on the verbal and mathematical sections or the Scholastic Aptitude Test. All scores below the median are considered low SAT scores.

Participation. Subjects attending a minimum of two consecutive six-week residential programs and one year of follow-up activities during the academic year.

Persistence in college. The length of time subject remains in college (measured in semesters).

Success in college. Attainment of the 2.0 grade point average out of a possible 4.0 most colleges require for graduation.

Upward Bound exposure. The number of months subjects participated in the program.

Significance of Study

Between the late 1960s and the present, many colleges and universities have attempted to make their resources available to an increasingly broad spectrum of the college age population. Upward Bound and similar programs, generally associated with institutions of higher education, have provided an access to college for many students from disadvantaged backgrounds. Although these students were generally identified as disadvantaged and categorized as "high risk," recent data indicate that more than 50% of the institutions of higher learning in the United States have special programs for disadvantaged students.

Numerous studies have examined the genealogy of special programs and how they affect the overall college or university. Egerton's (1968) study found that many colleges and universities have liberalized their admission policies for all students, and with the exception of the predominantly black colleges, private institutions have evidenced greater involvement in educating disadvantaged students than have public institutions.

Since it is extremely difficult to determine the specific factors responsible

for the success or failure of Upward Bound and similar special programs, this study's primary significance is that it attempts to address itself empirically to the question of a particular Upward Bound program's effectiveness in altering the achievement patterns and the college entrance rate of disadvantaged students. It is generally assumed that the high-risk student possesses intellectual qualities which have not been evidenced in previous academic performance. Success factors like scholastic motivation, adequate study skills, and a supportive social environment are the very conditions most often missing in the backgrounds of disadvantaged students. The primary objective of the Upward Bound program is to create such conditions and thereby alter achievement patterns.

This study attempts to illustrate that the academic mortality rate for the Rutgers Upward Bound student has been less than, or at least no higher than, the regular student's and that the college grade point average of graduates of the Rutgers program has generally been much better than would have been predicted from their high school grades and standardized test scores.

It is also hoped that this study will aid in the resolution of a problem that continues to cause great inconvenience for minority students--the standardized test. Many college and university admission officers still compare both white and non-white students on the basis of the same standardized (SAT or ACT) scoring criteria, without taking into consideration the fact that the score ceilings for non-whites are considerably lower.

CHAPTER II: METHOD

The questions relating to the Rutgers Upward Bound program's long-term impact on its participants do not lend themselves easily to experimental investigation and can be explored only quasi-experimentally or by the use of student's and other data to determine what happened in the natural situation.

Description of the Subjects

The population for this study consisted of all Rutgers Upward Bound participants who entered and graduated during the period 1966-1976. This population consisted of 183 females and 162 males. Table 1 details the population by year entering college and racial/ethnic background. Participants volunteered for the program and were selected according to their potential for success in a two- or four-year college, although they

evidenced the lack of educational preparation and/or achievement considered necessary for acceptance and success in such an institution. As indicated in Table 2, 59.0% of the participants were enrolled in general or commercial programs upon enrolling in Rutgers Upward Bound. Once accepted, all participants were required to change to a college preparatory program.

The sample of Rutgers Upward Bound participants taking the Scholastic Aptitude Test generally scored an average of 117 points below the mean score of the national sample for all years studied. The mean scores for participants entering college were 365 in verbal and 337 in mathematic skills (Table 3).

Rutgers Upward Bound participants usually came from large families. The mean family size for this population was 7.2 (Table 4). The participants were required to meet the economic criteria of the Office of Economic Opportunity (OEO) and, later, of the U.S. Office of Education (Appendix B). Table 5 illustrates the family income categories and distributions.

For the investigation of hypothesis 1, the sample of Upward Bound participants was matched with students from the general population on such variables as: income range, number of siblings in family, sex, age, type of high school attended, high school attended, high school grades, class rank, and type of college entered.

The sample from the general population was secured by asking the college registrars to match the Upward Bound alumni with another student attending the same college or university on the aforementioned variables (see Appendix E).

The sample for hypotheses 2, 3, and 4 consists of Upward Bound participants who completed the program and entered college between 1967-1976. As shown in Table 6,

TABLE 1

COLLEGE ENROLEES BY RACE AND YEAR GRADUATED
(In Percent)

Race	Year Graduated									
	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Total number	(29)	(43)	(26)	(39)	(42)	(34)	(20)	(12)	(16)	(33)
Black	89.3	88.1	73.1	87.5	88.4	75.8	70.0	70.0	76.5	91.0
White	10.7	7.1	26.9	5.0	9.3	3.0	0.0	0.0	17.6	3.0
Puerto Rican	0.0	4.8	0.0	7.5	2.3	21.2	30.0	30.0	5.9	6.0
Total	100	100	100	100	100	100	100	100	100	100

TABLE 2

TYPE OF HIGH SCHOOL CURRICULUM UPWARD BOUND PARTICIPANTS WERE ENROLLED IN UPON ENTERING THE PROGRAM
(In Percent)

Curriculum	Year Entered										Total %
	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	
College Preparatory	39.4	36.4	39.0	20.9	34.0	37.5	69.6	88.9	50.0	73.7	41.2
General	56.1	60.6	58.5	79.1	64.1	54.2	26.1	11.1	0.0	15.8	55.0
Commercial	4.5	3.0	2.5	0.0	1.9	8.3	4.3	0.0	50.0	10.5	3.8
Total percent	100	100	100	100	100	100	100	100	100	100	100
Total number	(66)	(33)	(41)	(43)	(53)	(24)	(23)	(39)	(2)	(19)	(295)

TABLE 3

COMPARISON OF RUTGERS UPWARD BOUND GRADUATES
MEAN SCHOLASTIC APTITUDE TEST SCORES
WITH NATIONAL SAMPLE

Year graduated	Mathematics		Verbal		V-M mean	
	Rutgers Upward Bound	National sample*	Rutgers Upward Bound	National sample*	Rutgers Upward Bound	National sample*
1966	0	0	0	0	0	0
1967	420	466	442	492	431	479
1968	361	466	371	492	366	479
1969	346	463	378	493	362	478
1970	327	460	348	488	338	474
1971	329	455	353	488	341	472
1972	315	453	363	484	339	469
1973	334	445	368	481	351	463
1974	323	444	406	480	365	462
1975	316	434	346	472	331	453
1976	326	431	350	472	338	452
1966-1976	337	452	365	484	351	468

*Source: College Entrance Examination Board, College Bound Seniors, 1974-1975. New York: College Entrance Examination Board, 1975.

TABLE 4

MEAN FAMILY SIZE OF UPWARD BOUND GRADUATES
BY YEAR ENTERING PROGRAM

Year entered	Mean family size
1966	5.9
1967	6.6
1968	7.8
1969	7.5
1970	6.9
1971	5.4
1972	7.2
1973	8.6
1974	.2
1975	7.6
Mean 1966-1975	7.2

TABLE 5

ANALYSIS OF FAMILY INCOME, 1966-1975

Income category	Percent
$ 0-2,999	22.0
3,000-5,999	54.0
6,000-7,499	16.0
7,500-8,999	5.0
9,000 or more	3.0
	100.0

a majority of the 292 participants enrolled in public four-year colleges and universities. Table 7 shows the number of high school graduates and college enrollees by year and percentages by sex.

Before 1970, the Rutgers program was limited primarily to students who had completed the tenth grade. In subsequent years, however, some students completing the ninth grade were selected.

Variables and Instrumentation

Independent Variables

Participation versus non-participation in the Upward Bound program. This treatment required participation in a minimum of two consecutive six-week residential programs held on the Douglass College campus, and a minimum of one academic year program. Participants failing to meet these criteria were not considered in the testing of these hypotheses.

Students in the program were exposed to a variety of cognitive and affective techniques related to instruction and counseling. The approaches to treatment were based on the premise that participants would be better able to deal with the more cognitive aspects of the program when they realized the accepting attitude of the Rutgers Upward Bound staff and became confident of achieving at least a small measure of success.

During the six-week summer program, an environment was created which afforded the staff full-time interaction with students. The program was based on meta-teaching rather than on simple teaching; skills were taught that would facilitate later learning of work habits considered desirable for the participants. Two kinds of meta-teaching were employed: (a) The teaching of attitudes, commitments, and, ultimately, a self-confidence favorable to academic achievement, and (b) the

TABLE 6

DISTRIBUTION OF STUDENTS ENROLLING IN COLLEGE

Control and level	Number	%
	Private	
2 years	1	.3
4-year college, university and professional	56	19.2
Total	57	19.5
	Public	
2 years	30	10.3
4-year college, university and professional	205	70.2
Total	235	80.5
Total public and private	292	100.0

TABLE 7

SEX OF UPWARD BOUND HIGH SCHOOL GRADUATES AND SEX OF UPWARD BOUND COLLEGE ENROLLEES (In Percent)

Year of graduation	High school graduates			Enrolled in college		
	Number	Male	Female	Number	Male	Female
1967	30	56.7	43.3	30	56.7	43.3
1968	47	49.0	51.0	43	44.2	55.8
1969	27	63.0	37.0	25	64.0	36.0
1970	40	55.0	45.0	38	57.9	42.1
1971	52	44.2	55.8	43	41.9	58.1
1972	41	53.7	46.3	35	51.4	48.6
1973	23	34.9	65.2	19	36.8	63.2
1974	12	41.7	58.3	10	30.0	70.0
1975	21	57.1	42.9	16	56.2	43.8
1976	52	25.0	75.0	33	21.2	78.8
1967-1976		47%	53%		47%	53%
N	345			292		

teaching of skills that help achieve the same objective.

The skills considered necessary for academic achievement were those found in most study habit programs--reading, writing, speaking, and listening--and the teaching of these skills comprised the major formal classroom activity. Additional learning experiences were also provided by recreational activities.

High Scholastic Aptitude Test (SAT) scores versus low Scholastic Aptitude Test (SAT) scores. The Scholastic Aptitude Test (SAT) is administered to high school juniors and seniors by the College Examination Board. The test yields two scores: verbal and mathematical. Since norms for the test were established nationally over a number of years, it is possible to make comparisons between students taking the test at different times. The reported reliability coefficient for the test given in the College Board Score Reports (1961) is .91. Participants were considered to have high Scholastic Aptitude Test scores if 50% of all students tested scored below their score. All others were considered to have low Scholastic Aptitude Test (SAT) scores.

Exposure to Rutgers Upward Bound. This treatment was measured in terms of the number of months the participants remained in the Rutgers Upward Bound program (the maximum participation being thirty-six months, the minimum, ten, for the purposes of this study).

Dependent Variable

Success in college. Students were considered successful in college based on a maintenance of the 2.0 out of 4.0 average most colleges require for graduation, which is considered the ultimate degree of success.

Procedure

Participants were recruited upon completion of the tenth grade. High school

guidance counselors are asked to recommend students for participation based on potential and socioeconomic status. A representative from the college then contacts prospective participants to explain the program, interested applicants are interviewed, and participants are selected.

The subjects of this study were recruited from sixteen New Jersey high schools between 1966-1973: Princeton High School, Princeton; Camden High School, Camden; Lakewood High School, Lakewood; J. P. Stevens High School, Edison; Carteret High School, Carteret; New Brunswick High School, New Brunswick; South Brunswick High School, South Brunswick; Colonia High School, Colonia; Perth Amboy High School, Perth Amboy; Trenton High School, Trenton; Franklin High School, Somerset; Piscataway High School, Piscataway; West Side High School, Newark; Rahway High School, Rahway; and Abraham Clark High School, Roselle.

Data examined in this study is based on the records of participants who entered the Rutgers Upward Bound program between 1967-1975.

Data Analysis

The data analysis utilizes such statistical procedures as χ^2 (test for equality of proportion), and the Mann-Whitney U test. The procedures will be accomplished through the use of Biomedical Computer Programs and other programs written by Computer Consultants at the Rutgers Computer Center especially for this study.

CHAPTER III: RESULTS

Procedure

The procedure stated below, as outlined in Tuckman (1972) was used in the presentation of the results of this study:

1. Each hypothesis will be restated.

2. A descriptive statement will be made about the statistical outcome of the hypothesis testing.

3. A concluding statement will be made indicating whether or not the data justify acceptance or rejection of the hypothesis.

Testing of the Hypothesis

Hypothesis 1

Participants in the Rutgers Upward Bound program will succeed in college to a more significant degree ($p < .05$) than will non-participants.

The sample of 518 yielded the data shown in Table 8. Since the calculated χ^2 value 11.17 exceeds the critical χ^2 value of 3.84 at the .05 level ($p < .05$), the data justifies the acceptance of the hypothesis.

Hypothesis 2

Among Rutgers Upward Bound participants enrolled in college, those who achieve high-class rank upon graduation from high school will succeed in college to a more significant degree ($p < .05$) than those achieving low-class rank.

Since the calculated Z score of 2.74 exceeds the critical Z score of 1.64 at the .05 level ($p < .05$) and the critical Z value of 2.32 at the .01 level ($p < .01$), the data justifies the acceptance of the hypothesis ($U = 6603$, $n = 122$, $N_2 = 135$, $p < .01$).

Hypothesis 3

There is no significant difference in college success for Rutgers Upward Bound participants who enroll with high Scholastic Aptitude Test (SAT) scores and those Rutgers Upward Bound participants with low scores.

The sample of 250 participants yielded the data shown in Table 9. Since the calculated χ^2 of 2.80 does not exceed the critical χ^2 value of 3.84 at the .05 level ($p < .05$), there are not sufficient data to reject the null hypothesis.

Hypothesis 4

Rutgers Upward Bound participants with more exposure to the program (measured in months of participation) will enroll in college to a more significant degree ($p < .05$) than those participants with less exposure.

The sample of 345 participants yielded the data shown in Table 10. Since the calculated value of 3.43 does not exceed the critical χ^2 value of 5.99 at the .05 level ($p < .05$), the data justifies the rejection of the hypothesis.

Hypothesis 5

Rutgers Upward Bound participants with more exposure to the program will succeed in college to a more significant degree ($p < .05$) than those Rutgers Upward Bound participants with less exposure.

The sample of 292 participants yielded the data shown in Table 11. Since the calculated χ^2 value of 1.51 does not exceed the critical χ^2 value of 5.99 at the .05 level ($p < .05$), the data justifies the rejection of the hypothesis.

ANALYSIS OF ASSOCIATION
BETWEEN SUCCESS IN COLLEGE
FOR UPWARD BOUND PARTICIPANTS
AND NON-PARTICIPANTS
1966 - 1975

Program participation	Success in college		
	Yes	No	Total
Upward Bound	143	116	259
Non-Upward Bound	105	154	259
Total	248	270	518

Significance of association: Significant

Degrees of freedom: 1

χ^2 value: 11.17

TABLE 9

ANALYSIS OF ASSOCIATION BETWEEN SCHOLASTIC APTITUDE TEST SCORES (SAT) AND COLLEGE SUCCESS

College success	SAT scores		
	High	Low	Total
Successful	69	47	116
Unsuccessful	66	68	134
Total	135	115	250

Significance of association: Insignificant

Degrees of freedom: 1

χ^2 value: 2.80

ANALYSIS OF ASSOCIATION BETWEEN PROGRAM EXPOSURE AND COLLEGE ENROLLMENT

Months in program	Did students enroll in college?		
	Yes	No	Total
1-10	8	4	12
11-20	52	10	62
Over 20	232	39	271
Total	292	53	345

Significance of association: Insignificant

Degrees of freedom: 2

χ^2 value: 3.43

ANALYSIS OF ASSOCIATION BETWEEN PROGRAM EXPOSURE AND COLLEGE SUCCESS

Months in program	Is participant still enrolled or graduated?		
	Yes	No	Total
0-10	3	5	8
11-20	30	21	51
Over 20	123	110	233
Total	156	136	292

Significance of association: Insignificant

Degrees of freedom: 2

χ^2 value: 1.51

CHAPTER IV: DISCUSSION

Purpose

The national Upward Bound program was designed to give young people from low-income backgrounds and inadequate secondary preparation the academic skills and motivation for success in postsecondary education. This study proposed to examine the extent to which Rutgers Upward Bound services such as developmental instruction, altered curriculum, tutoring, cultural exposure, and general encouragement affected the participants. The relationship between such variables as program participation, length of time of participation, Scholastic Aptitude Test (SAT) scores, and class rank was also studied.

Methodology

The sample consisted of 345 students from sixteen high schools who participated in the Rutgers Upward Bound program between 1966-1976 and attended at least two consecutive six-week summer residential programs and one academic follow-up program.

The procedure began with the collection of basic demographic data on participants from 1966-1967, including Rutgers Upward Bound application data, high school and college transcripts, and program performance data. To provide additional data on Upward Bound participants for hypothesis 1, a matching group was selected from among non-Upward Bound participants attending college during the same decade.

Conclusions

The findings of this study led to the following conclusions:

1. The college success rate for participants in the Rutgers Upward Bound program was significantly higher than for non-participants.

2. College success for participants considered to have scored low on the Scholastic Aptitude Test was not significantly higher than those participants considered to have scored high.

3. The college success rate of participants with high-class rank was significantly higher than for those participants with low-class exposure.

4. The association between exposure to the program and college enrollment was insignificant; those with more exposure were not enrolling at significantly higher rates than those with less exposure.

5. The association between exposure to the program and college success was

insignificant; participants with more exposure to the program were not succeeding in college at significantly higher rates than those with less exposure.

Interpretation

The findings seem to indicate that the Rutgers Upward Bound program was highly successful both in motivating participants to enroll in college and in providing them with the compensatory academic skill preparation necessary for success in college.

In an attempt to interpret the findings associated with hypotheses 4 and 5, the investigator felt it important to note that a majority of the students selected for participation in the Rutgers Upward Bound program during the first two years of operation were seniors in high school, therefore limiting exposure to the program to one year (two summers and one academic year). Many of these one-year participants were encouraged to enter forms of post-secondary education other than college, which was acceptable under the program Guidelines for the first two years of operation.

The variables studies in hypotheses 4 and 5 also produced empirical data that did not permit an evaluation of the intervention strategies of the Rutgers Upward Bound program; nor did the data reveal the personal, social, programmatic or institutional factors associated with the success of the "disadvantaged." Because of the fact that Rutgers Upward Bound participants were individuals with a prior record of under-achievement and/or low scholastic aptitude test scores, the variables studied in hypotheses 4 and 5 did not permit an understanding of what strategies, if any, the colleges and/or universities engaged in to facilitate services and improve academic performance. In the interpretation of these data, little is known about the academic environment Rutgers Upward Bound alumni entered.

Integration

What do the results say about the following questions?

1. Did the Rutgers Upward Bound program succeed in reducing the high school dropout rate?

2. Were Rutgers Upward Bound participants underachievers while in high school?

3. Were Rutgers Upward Bound participants selected from the target population as outlined in the national Upward Bound guidelines?

4. Did Rutgers Upward Bound participants enroll in college, and graduate, in large numbers?

5. Was there a relationship between the type of college attended and success in college?

6. Was a standardized test such as the Scholastic Aptitude Test (SAT) a sound indicator of college success?

7. Was there any relationship between the college enrollment and graduation rate for the Rutgers Upward Bound participants and the national Upward Bound?

During the period June 1966 through June 1975, of the participants enrolled in the Rutgers Upward Bound program, 97 percent were high school graduates. (This figure includes students who did not graduate from the Rutgers Upward Bound program.) The high graduation rate may be attributed to the fact that the Rutgers Upward Bound program was certified as summer school by the New Jersey State Department of Education (see Appendix D).

Rutgers Upward Bound participants were underachievers with a mean Grade Point Average (GPA) of 1.88 upon entering the program. It

should be noted that the mean Grade Point Average (GPA) did not change to a great degree as a result of their participation. The mean existing Grade Point Average (GPA) was 2.15 (see Table 12). In assessing the relatively small change in the Grade Point Average (GPA) of graduating participants of the Rutgers Upward Bound program, it should be noted that many of these students were changing in mid-stream from a general academic program which was less rigorous than the college preparatory program of their high schools. To be admitted to college it was imperative that they accrue at least one year of a foreign language, one year of a science, and at least two years of college preparatory mathematics.

As indicated in Table 13, over a ten-year period of time, 85.3 percent of the Rutgers Upward Bound participants enrolled in two- and four-year colleges and universities. Ten percent went on to other forms of post-secondary study. Twenty-six percent of those enrolling in college have graduated and 19.4 percent are presently enrolled; 6.8 percent of those graduating from college are enrolled in graduate school (see Table 14). The graduation/retention rate for Rutgers Upward Bound participants is equal to that of the national average for students entering college, which approximates 50 percent. It should be pointed out, however, that according to Crossland (1971), only about 5 percent of this population would have ever enrolled in college.

Although it appears that students attending four-year colleges and universities persisted with their education to a greater degree than those attending two-year colleges, it should be noted that it was difficult to trace students from two-year colleges after they transferred or graduated.

On the Scholastic Aptitude Test, participants scored at least one standard deviation below the mean score for the national population. High school class rank therefore seems to have been a more accurate indicator of

TABLE 12

AVERAGE GRADE POINT AVERAGE
AT ENTRY TO AND EXIT FROM
UPWARD BOUND BY YEAR ENTERED

Year entered	Average GPA		Change
	Entering Upward Bound	Exiting Upward Bound	
1967	2.14	2.22	+0.08
1968	2.04	2.17	+0.13
1969	2.12	2.12	+0.00
1970	2.24	2.07	-0.17
1971	2.59	2.22	-0.37
1972	2.07	2.33	+0.26
1973	1.75	2.15	+0.40
1974	1.00	2.10	+1.10
1975	1.00	2.05	+1.05
Total (9 year average)	1.88	2.15	+0.27

TABLE 13

COLLEGE ENROLLMENT OF UPWARD BOUND PARTICIPANTS BY YEAR
(In Percent)

Year graduated	Number of high school graduates	% of high school graduates enrolling in college
1967	30	93.3
1968	47	91.3
1969	27	96.3
1970	40	100.0
1971	52	80.7
1972	41	83.0
1973	23	87.0
1974	12	83.3
1975	21	76.1
1976	52	62.0
Total	345	85.3

TABLE 14

EDUCATIONAL STATUS OF RUTGERS UPWARD BOUND GRADUATES, 1967-1975

Category	Percentage
1. Presently attending	19.4
2. Graduated college	26.0
3. Dropped (academic reasons)	9.0
4. Withdrew (personal reasons)	30.1
5. Never enrolled in college	15.4
Total	99.9
6. Enrolled in graduate school	6.79

success than the Scholastic Aptitude Test (SAT).

The latest data available from the U.S. Office of Education indicated that as of January 1973, 28.3 percent of the national Upward Bound participant population had graduated from Upward Bound and enrolled in college as compared to the 85 percent of Rutgers Upward Bound graduates enrolling in college. The college graduation rate of Rutgers Upward Bound was significantly higher than the national average of 1.4 percent reported in 1973 by the U.S. Office of Education.

A sizeable majority (92 percent) of Upward Bound participants were from families whose income was within the poverty criteria as established on Lists A and B in the Guidelines (see Appendix B); 60 percent met the requirements because their families were on welfare or lived in generally supported housing. Eight percent of the participants were from families with incomes higher than those amounts specified in the Guidelines. These families produced evidence that the family income did not accrue to the benefit of the participant.

Limitations of the Study

Proxy measures of particular success had to be used because of a lack of program performance data on such variables as motivation to enter college, and academic performance data accurately measuring the program's ability to provide students from the target papulation with the necessary academic background for success in college. Over the past three years, it also became increasingly harder to secure information concerning high school and college performance of past graduates--a factor which to some degree limited the population studied.

The sample examined was further reduced because many of the high schools, colleges, and universities required a student's written consent before they would release a transcript.

Once students enrolled in college, especially the two-year colleges, the program lost contact, for various reasons, with some of the students. Difficulty in collection and coding college performance data was another factor limiting the scope of the study.

Importance of the Study

The results of this study have implications for individuals involved in all aspects of higher education, particularly now that many colleges and universities in New Jersey and the nation are apparently once again applying very rigid admission standards. The results also clearly point to the need for flexible admission procedures while demonstrating that such criteria as the Scholastic Aptitude Test and other achievement tests used in the admissions process are not the best predictors of success for the disadvantaged.

Suggestions for Further Research

The overall impact of the Rutgers Upward Bound program on its participants cannot be measured merely in terms of the educational questions addressed in this study. The question of financial gain to the individuals, their families, and the Federal government should be investigated--an area which can be explored only by using a benefit/cost analysis model to evaluate the program.

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APPENDIX A

SUMMARY DATA--PREVIOUS RUTGERS UPWARD BOUND RESEARCH

TABLE A1

HOW FAR IN SCHOOL WOULD YOU LIKE TO GO?

	% Upward Bound					
	Rutgers		National		Region I (northeast)	
	1966-1967	1967-1968	1966-1967	1967-1968	1966-1967	1967-1968
A. Get out as soon as possible	0	0	1	1	1	1
B. A little more high school	0	0	1	1	1	1
C. Finish high school	2	2	4	3	5	4
D. Post-high school	98	98	94	94	98	95

TABLE A2

HOW FAR IN SCHOOL DO YOU BELIEVE YOU ACTUALLY WILL GO?

	% Upward Bound					
	Rutgers		National		Rutgers I (northeast)	
	1966-1967	1967-1968	1966-1967	1967-1968	1966-1967	1967-1968
Post-high school	82	89	82	76	78	82

TABLE A3

WHAT IS HIGHEST SCHOOL GRADE COMPLETED BY YOUR MOTHER, BY YOUR FATHER?

	Rutgers Upward Bound, %		National Upward Bound, %		United States high schools, %, 1967
	1966-1967	1967-1968	1966-1967	1967-1968	
Father's education					
12 years	21	17	19	19	23
More than 12 years	11	12	12	12	25
Total	32	29	31	31	58
Mother's education					
12 years	34	33	29	27	34
More than 12 years	12	9	14	13	23
Total	46	42	43	40	47

TABLE A4

EDUCATIONAL LEVEL OF OLDER BROTHERS OR SISTERS

	Rutgers Upward Bound, %	National Upward Bound, %
Dropped out of School	27	26
Still in high school	8	8
Graduated from high school	38	39
Went on to further education	25	25

TABLE A5

MEDIAN FAMILY INCOME OF UPWARD BOUND STUDENTS

	1967-1968 ($)	1966-1967 ($)
Rutgers	3,900	4,000-4,500
Northeast United States	4,350	4,000-4,500
National	3,401	3,500-4,000

TABLE A6

FAMILY SIZE AND COMPOSITION COMPARED TO A NATIONAL HIGH SCHOOL SAMPLE

	Rutgers Upward Bound, %		National Upward Bound, %		United States high schools, %, 1967
	1966-1967	1967-1968	1966-1967	1967-1968	
Mean family size	(5.4)	(5.5)	(5.9)	(6)	(4.5)
Six or more in family	43	47	53	53	30
Student lives with both mother and father	42	39	51	49	80
Mother only	40	44	30	30	6

TABLE A7

PARENTS' AND BEST BRIENDS' FEELINGS ABOUT STUDENTS' PARTICIPATION IN SUMMER UPWARD BOUND

	Rutgers, %		Northeast, %		National, %	
	1966-1967	1968	1966-1967	1968	1966-1967	1968
Parents						
Do not know or care	2	3	4	5	4	1
Unfavorable	3	6	4	6	4	6
Mixed feelings	5	5	4	5	5	6
Favorable	90	86	88	83	86	84
Best Friend						
Do not know or care	6	10	16	16	15	14
Unfavorable	11	6	12	10	13	10
Mixed feelings	19	15	14	13	15	14
Favorable	64	68	57	60	57	61

TABLE A8

COMPARISON OF GPA FOR UPWARD BOUND AND CONTROL STUDENTS IN 20 TARGET PROGRAMS AND REAP

N	Program	Upward Bound GPA June	Feb.	Change	Matched control student GPA June	Feb.	Change	Difference between change scores
Males only								
677	20 target programs	2.02	1.93	-.09	1.97	1.87	-.10	+.01
58	REAP Upward Bound	1.64	1.84	+.20	1.67	1.51	-.16	+.36
Females only								
626	20 target programs	2.37	2.32	-.05	2.36	2.34	-.02	-.03
52	REAP Upward Bound	2.16	2.32	+.16	2.10	2.15	+.05	+.11
Total								
1302	20 target programs	2.19	2.11	-.08	2.16	2.10	-.06	-.02
110	REAP Upward Bound	1.88	2.07	+.19	1.87	1.82	-.05	+.24

TABLE A9

POST-SECONDARY SCHOOL EDUCATIONAL PLANS

		National Upward Bound, % (N=12,028)		REAP Upward Bound, % (N=119)	
A.	Will not finish high school	1		0	
B.	Graduate from high school only	26		8	
C.	Vocational, business school, or junior college	21		17	
D.	Some college	10	73	8	91
E.	College graduation	27		37	
F.	Advanced college degree	15		29	
G.	No answer	0		3	

TABLE A10

REAP UPWARD BOUND PROGRAM CLIMATE CHARACTERISTICS

Measure (in order of rating by REAP Upward Bound students)	Rank in relation to 21 target programs	Positive difference in relation to typical target programs
1. Individualization	1	< .001
2. Antonomy	1	< .001
3. Supportiveness (self-concept)	3	< .001
4. Group harmony	6	< .002
5. Flexibility	7	< .02
6. Warmth	5	Not significant
7. Student evaluation	9	Not significant
8. Staff harmony	10	Not significant

APPENDIX B

UPWARD BOUND GUIDELINES

The Upward Bound Student

A. Target Group. The Upward Bound student is a young person with academic potential who because of his poverty background has not had the motivation or preparation to use or demonstrate this potential. Typically this student may be apathetic or even hostile because he comes from a disadvantaged environment unable to help him release his real talent, or he has shunned meaningful educational pursuits because of inadequate school experiences. Quite often the potential that such a student possesses may not show in traditional measurements, such as standardized test scores or grades, but may be revealed more readily through intuitive judgments. The Upward Bound boy

or girl is one for whom a college education may become possible, given experiences and instruction necessary to overcome earlier obstacles. Without this kind of experience these students would probably not have considered college, or might even have dropped out of high school.

B. Income Criteria. Students who meet the selection criteria above and are to be financed by OEO must be from families whose annual incomes meet the poverty criteria set forth below.

1. The following income levels must be met by at least 90%, repeat 90%, of the OEO-financed Upward Bound students:

(A)

Family Size	Non-Farm	Farm
1	$1,600	$1,100
2	2,100	1,500
3	2,600	1,800
4	3,300	2,300
5	3,900	2,800
6	4,400	3,100
7	4,900	3,400
8	5,400	3,800
9	5,900	4,100
10	6,400*	4,500**

2. Up to 10% of the OEO-financed Upward Bound students may come from families with the following incomes:

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* Above 10 -- add $500 for each additional member.

** Above 10 -- add $350 for each additional member.

(B)

Family Size	Non-Farm	Farm
1	$2,000	$1,500
2	3,000	1,900
3	3,500	2,300
4	4,000	2,600
5	4,500	3,000
6	5,000	3,400
7	5,500	3,800
8	6,000	4,200
9	6,500	4,600
10	7,000*	5,000**

3. The OEO income requirement is satisfied if the prospective student lives in federally supported public housing.

4. Students may be selected for Upward Bound whose family income is higher than those in 1 and 2 above if there is serious mismanagement of family income and little if any of such income accrues to the benefit of the student. In such cases, the applicant or delegate academic institution must obtain written testimony from a reliable third party that serious mismanagement of a family's income does exist and works a significant hardship on the prospective Upward Bound student.

5. Students from families on state or federally funded types of welfare are deemed to have met OEO's income criteria.

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* Above 10 -- add $500 for each additional member.

** Above 10 -- add $350 for each additional member.

Institutions wishing to enroll additional students whose income levels do not meet these criteria are encouraged to obtain funds from other public or private sources. Such additional students will serve to diversify the backgrounds of the Upward Bound group and may thereby enhance the educational program.

C. Service Focus. Upward Bound will focus on students completing the tenth and eleventh grades. However, for areas or among particular groups of students showing severe dropout rates at an earlier age, Upward Bound will consider proposals reflecting the need for intervention at the end of eighth and ninth grade levels. Past experience has shown that Upward Bound programs, which, on the one hand, have limited themselves to one grade level, or which, on the other hand, have sought students from too wide a grade spectrum, have been less successful.

OEO wishes to make it entirely clear that, once a program begins, institutions must be prepared to work with the Upward Bound students through the secondary school years and to design Upward Bound programs for these students through the summer following the twelfth grade, that is through what we call the Bridge Summer -- the summer between high school graduation and college enrollment. OEO feels that, in general, institutions which select students who have graduated from high school and enroll them for only one summer do not have sufficient time to work with the Upward Bound students. It therefore discourages submission of proposals containing such a component.

It is expected that at least 80% of the students to be financed by OEO will be from areas served by an approved Community Action Agency (CAA).

D. Recruitment. An applicant institution will be expected to use a wide variety of recruitment sources. Individual classroom teachers, guidance officers, school principals, and high school students are natural sources of referrals. However, recruitment should not be limited to referrals from secondary schools only. In many instances the youngster who can benefit from Upward Bound may be found only after careful and thorough, direct and personal canvassing of the pockets of poverty in both urban and rural settings. OEO will require the applicant to show evidence that it sought students through a varied recruitment program, including, but not limited to, referrals from present Upward Bound students, cooperation with CAA's, neighborhood visits, Youth Opportunity Centers, VISTA Volunteers, Neighborhood Youth Corps, juvenile court officers, settlement houses, churches, and other community organizations. To make further education possible for Job Corps members who can benefit from Upward Bound, OEO has arranged that they may participate in the program and continue their education. OEO urges applicants to contact nearby Job Corps centers as sources for Upward Bound students.

E. Selection. Students selected for Upward Bound shall be those who have potential for success in a two or four year college, but whose present level of achievement and/or motivation would seem to preclude their acceptance in such an institution.

Recommendations from persons who know the applicant (such as classroom teachers)and intuitive judgments by these and other persons are as important for selection as patterns of grades and test scores. Applicant institutions should make it possible for individual students to make application to an Upward Bound program, as the mere formality of institutional recommendations may dissuade applicants from seriously considering an Upward Bound program. While

a moderate amount of testing after admission to an Upward Bound project is permissible, testing for admission is discouraged.

It is very important that candidates be personally interviewed by some members of the Upward Bound staff prior to admission into the program.

In the final analysis, the Upward Bound director and his staff are responsible for effective recruitment strategies and for a wise selection of Upward Bound students; recruitment and selection cannot be delegated. Moreover, the very nature of the program and its eventual success depends upon a wise and effective selection of youngsters. In no case should a youngster be invited into Upward Bound unless the project staff firmly believes that the youngster has some genuine likelihood of eventual success in college.

F. General Area of Services. It is important that colleges with Upward Bound programs work closely with the secondary schools from which the students come. An Upward Bound project should therefore serve an area close enough to provide convenient working relationships with local schools. A project should generally serve areas which are not more than 50 miles from the campus at which students will reside for the summer, although exceptions to this principle will be permitted when circumstances so dictate. While many projects may serve more than one community, an attempt to serve too many and/or too distant communities often reduces opportunities for a significant group of students to come from any single high school and, in addition, makes academic year efforts much less effective. Having a sizeable cluster of students returning to a single school is very important. Both in the summer and in the academic year a cluster of students should gain a common core of experience to share with one another and with their school classmates. Wherever

possible, secondary school staff from the schools from which the Upward Bound students are coming should be used in a teaching, tutorial, or counseling capacity during the entire period of the program -- summer as well as academic year.

APPENDIX C

RUTGERS UPWARD BOUND STUDENT APPLICATION FORM

Student Application
(Please Print)

High School_____ Present Grade_____

Name_____ Sex: Male___ Female_____

Birth Date_____ Social Security No._____

Home Address_____
Number Street City State Zip Code

Home Telephone_____

Father/Guardian Name_____ Father's Occupation_____

Father's Address_____
Number Street City State Zip Code

Mother/Guardian Name_____ Mother's Occupation_____

Mother's Address_____
Number Street City State Zip Code

Other persons in family:

Name	Age	Living at Home
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Home language: English only_____
English plus one or more others_____
Only a language other than English_____

What is your current program in school?

Business_____ College Preparatory_____

General_____ Other (specify)_____

In order to meet Upward Bound selection guidelines, it is necessary for the Project Director to have certain financial information. Send a photostatic copy of your parents' or guardian's most recent Income Tax Return Form 1040. This information is strictly confidential and used only by the Director in assisting him in making selection decisions. Please fill in the following:

1. Parents' monthly salaries and wages

   A. Father $_____

   B. Mother $_____

2. Other income per month (specify)

   $_____

3. Amount of Welfare Check (if received)

   $_____

4. Total income of family per month (add #'s 1, 2, and 3)

   $_____

In case of an emergency, we should contact:

Name_____ Relationship_____

Address_____

Telephone_____

We declare that the information reported on this form to the best of our knowledge and belief is true, correct, and complete.

Parent's Signature_____

Name of Student_____

APPENDIX D

NOTICE OF SUMMER SCHOOL CERTIFICATION

State of New Jersey
Department of Education
225 West State Street
P. O. Box 2019
Trenton, New Jersey 08625

June 1, 1967

Dr. Laurence Hopp, Director
Rutgers Educational Action Programs
433 George Street
New Brunswick, NJ 08903

Dear Dr. Hopp:

In view of the fact that the principals of the schools involved with your Upward Bound program have already given their consent for the students to attend your summer program and have indicated an acceptance of the remedial work done by your school, the matter of recognition of this work is taken care of.

State approval of summer schools is only extended to those schools that have open enrollments and accept students from all over the State. I have discussed this matter with you before, hence, I see no problem in recognizing the work done by the students since the schools have already given their consent.

State regulation indicates that where students are repeating work, the matter of eliminating failure or improving grades is a matter for local discretion. It appears that this matter has been taken care of.

With every good wish for another successful program this year, I remain,

Yours very truly,

[signed]

William H. Warner
Director of Secondary Education

WHW:MF

APPENDIX E

RUTGERS UPWARD BOUND COLLEGE FOLLOW-UP STUDY

Explanation to Recorders

To complete this form, we are asking you to select a control student who is as similar as possible to our former Upward Bound student.*

Item 2A The Control student should be someone who has not had Upward Bound type help or compensatory type programs in high school. This control student probably meets the OEO poverty criteria and would have been eligible to participate in Upward Bound but did not.

---

* If the former Upward Bound student is no longer attending your institution, please indicate the grades for the time he was there as well as the reason for leaving under Item 4C.

Item 2B A code or number used by your institution may be used to identify the control student.

Item 2C Upward Bound and control student should be same sex.

Item 2D Ages should be in normal range for undergraduate students at your institution.

Item 2F The major program pursued.

Item 2G Does the student live in dorm, town housing, commute from home, etc.?

Item 3A List first and second semester freshman letter or numerical grades.

Item 3B Calculate a numerical average. If marking system differs from usual A=4; B=3; C=2; D=1; F=0, please explain in Item 3G.

Item 3C If numerical (e.g., 30/4000) is not known, other categories such as "top quarter" would be helpful.

Item 3D Indicate first and second semester sophomore grades.

Item 3F Indicate first and second semester junior grades.

Item 3G If a cumulative GPA is readily available for both students, please indicate. If not, class rank is sufficient.

Item 4B Please indicate the faculty member or counselor who knows most about the former Upward Bound student's progress in college.

Item 4C Comments such as (1) financial assistance needs for semester or year, (2) participation in college activities, (3) prognosis for success in college, (4) other remarks.

Student Grade Form

1. Name of Institution _____ Date _____

2A. Upward Bound Student

B. Name _____
(last) (first)

C. Sex (circle) M F

D. Age _____

E. Racial or ethnic background

_____

F. Curriculum _____

G. Campus residency _____

3A. Freshman Grades

Course	Final Grades
_____	_____
_____	_____

Control Student

_____
Name or identifying code or number

Sex (circle) M F

Age _____

Racial or ethnic background

_____

Curriculum _____

Campus residency _____

Freshman Grades

Course	Final Grades
_____	_____
_____	_____

(continued)

Course	Final Grades
_____	_____
_____	_____

B. Grade Point Average _____

C. Student's Rank in Class _____

D. Sophomore Grades

Course	Final Grades
_____	_____
_____	_____
_____	_____
_____	_____

E. Junior Grades

_____	_____
_____	_____

Course	Final Grades
_____	_____
_____	_____

Grade Point Average _____

Student's Rank in Class _____

Sophomore Grades

Course	Final Grades
_____	_____
_____	_____
_____	_____
_____	_____

Junior Grades

_____	_____
_____	_____

(continued)

Course	Final Grades	Course	Final Grades
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

F. GPA_____ GPA_____

G. Cumulative GPA_____ or class rank Cumulative GPA_____ or class rank

H. Explain briefly grading system. Explain briefly grading system.

4A. Recorder's name and position _____

B. Upward Bound student's advisor _____

C. Other comments _____

_____

_____

_____

(continued)

Thank you for your cooperation. Please return this form to: Rutgers Upward Bound
433 George Street
New Brunswick, NJ
08901

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APPENDIX F

STATUS QUESTIONNAIRE

The student listed below was a participant in the Rutgers Upward Bound program prior to his/her entry into college. So that we may update the student's record, we ask your assistance in completing the information requested.

Place an (X) in appropriate space and fill in information where needed.

1. Student's Name_____

2. Present Address_____

3. College Major_____

4. Has student been graduated?

a) yes_____ Year 19__
b) no _____ (please answer item 5)

5. Is student currently enrolled?

   a) Yes_____ Classification: Fresh.__
      Soph.__ Jr.__ Sr.__
      Expected graduation date 19__

   b) No_____ Last attended: Fall__
      Spring__ 19__
      Reason: Withdrew__ Dropped__
      Transfer__

6. Student:

   a) Never entered__
   b) Unknown__

APPENDIX G

UPWARD BOUND PROJECT PROFILES

AREA 02 PART 01 08/75

DHEW-US OFFICE OF EDUCATION-BPE-DSSSP
SPECIAL PROGRAMS BRANCH
YEAR-END REPORT FOR PROGRAM YEAR 1974-75
(REGULAR AND VETERAN STUDENTS)
DURING THE PERIOD 07/74 THRU 06/75

SUMMARY FOR RUTGERS--THE STATE UNIVERSITY
NJ

PART-1 EDUCATIONAL AND PERSONAL CHARACTERISTICS	MALES	FEMALES	NO INDIC. OF SEX	RETURNEE	NEW STUDENTS	NO INDIC.	TOTAL
TOTAL PARTICIPANTS	48	72	0	112	8	0	115
CURRENT STUDENTS	38	62	0	92	8	0	100
FORMER STUDENTS--NON-HIGH SCHOOL GRADUATES	6	2	0	8	0	0	8
FORMER STUDENTS--HIGH SCHOOL GRADUATES	4	8	0	12	0	0	12
A. CURRENT OR (IF SUMMER) LAST GRADE							
1. SEVENTH OR BELOW.	0	0	0	0	0	0	0
2. EIGHTH.	0	0	0	0	0	0	0
3. NINTH	0	1	0	1	0	0	1
4. TENTH	8	1	0	9	0	0	9
5. ELEVENTH.	9	22	0	29	2	0	31
6. TWELFTH	15	35	0	44	6	0	50
7. H.S. GRADUATES STILL IN UB.	14	8	0	22	0	0	22
8. H.S. GRADUATES NO LONGER IN UB.	2	5	0	7	0	0	7
9. NO INDICATION OF GRADE.	0	0	0	0	0	0	0
10. HIGH SCHOOL DROPOUTS.	0	0	0	0	0	0	0
11. STUDENTS WKG FOR G.E.D.	0	0	0	0	0	0	0

(continued)

PART 01 (continued)

B. EDUCATIONAL SECTOR	MALES	FEMALES	NO INDIC. OF SEX	RETURNEE	NEW STUDENTS	NO INDIC.	TOTAL
1. NO. STUDENTS IN PUBLIC SCHOOLS	42	64	0	98	8	0	106
2. NO. STUDENTS IN CHURCH SUPPORTED SCHOOLS	0	0	0	0	0	0	0
3. NO. STUDENTS IN INDEPENDENT SCHOOLS	4	6	0	10	0	0	10
4. NO. STUDENTS IN OTHER (E.G. BIA) SCHOOLS	0	0	0	0	0	0	0
5. NO INDICATION	2	2	0	4	0	0	4
C. GRADE POINT AVERAGE AT ENTRY							
1. GPA = A	0	0	0	0	0	0	0
2. GPA = B	1	12	0	11	2	0	13
3. GPA = C	9	14	0	20	3	0	23
4. GPA = D	10	11	0	18	3	0	21
5. GPA = F	1	4	0	5	0	0	5
6. NO INDICATION OR NONSTANDARD SCALE	27	31	0	58	0	0	58
D. AGE RANGES AT ENTRY							
1. 13 YEARS OR LESS	0	0	0	0	0	0	0
2. 14-16 YEARS	28	55	0	82	1	0	83
3. 17-19 YEARS	19	17	0	29	7	0	36
4. 20-22 YEARS	0	0	0	0	0	0	0
5. OVER 22 YEARS	0	0	0	0	0	0	0
6. NO INDICATION	1	0	0	1	0	0	1
E. SEX							
1. MALES	48	0	0	46	2	0	48
2. FEMALES	0	72	0	66	6	0	72
3. NO INDICATION	0	0	0	0	0	0	0
F. ETHNO-RACIAL BACKGROUND							
1. NEGRO	38	60	0	92	6	0	98
2. WHITE	4	2	0	6	0	0	6
3. AMERICAN INDIAN	0	0	0	0	0	0	0
4. ORIENTAL	0	0	0	0	0	0	0
5. MEXICAN AMERICAN	0	0	0	0	0	0	0
6. PUERTO RICAN	6	10	0	14	2	0	16
7. OTHER	0	0	0	0	0	0	0
8. NO INDICATION	0	0	0	0	0	0	0

AREA 0 PART 02 08/75

SUMMARY FOR RUTGERS -- THE STATE UNIVERSITY
NJ

DHEW-US OFFICE OF EDUCATION-BPE-DSSSP
SPECIAL PROGRAMS BRANCH
YEAR-END REPORT FOR PROGRAM YEAR 1974-75
(REGULAR AND VETERAN STUDENTS)
DURING THE PERIOD 07/74 THRU 06/75

PART-2 FAMILY CHARACTERISTICS AND POVERTY CRITERIA BY SEX AND TYPE OF STUDENT	MALES	FEMALES	NO INDIC. OF SEX	RETURNEE	NEW STUDENTS	NO INDIC.	TOTAL
TOTAL PARTICIPANTS	48	72	0	112	8	0	120
CURRENT STUDENTS	38	62	0	92	8	0	100
FORMER STUDENTS--HIGH SCHOOL GRADUATES	6	2	0	8	0	0	8
FORMER STUDENTS--NON-HIGH SCHOOL GRADUATES	4	8	0	12	0	0	12
A. POVERTY CRITERIA USED AT ADMISSION							
1. FAMILIES ON WELFARE OR ADC	23	25	0	44	4	0	48
2. RESIDENCE IN PUBLIC HOUSING	6	6	0	11	1	0	12
3. MISMANAGEMENT OF FAMILY INCOME	3	3	0	6	0	0	6
4. RESIDENCE IN INSTITUTION ETC.	0	0	0	0	0	0	0
5. TRANSFER FROM OTHER POVERTY PROGRAM	0	0	0	0	0	0	0
6. STUDENTS ADMITTED ON CALCULATED CRITERIA							
A. TOTAL MEETING LIST 'A' CRITERIA	8	19	0	27	0	0	27
B. ABOVE LIST 'A' BUT WITHIN LIST 'B' CRITERIA	2	4	0	6	0	0	6
C. INSUFFICIENT DATA TO CALCULATE TOTAL							
C1. LIST 'A' INDICATED	4	4	0	8	0	0	8
C2. LIST 'B' INDICATED	0	0	0	0	0	0	0
C3. NO INDICATION	0	0	0	0	0	0	0
D. TOTAL ABOVE LIST 'A' AND LIST 'B'							
D1. $0-499 ABOVE LIST 'B'	0	1	0	1	0	0	1
D2. $500 OR MORE ABOVE LIST 'B'	2	10	0	9	3	0	12
B. FAMILY SIZE							
1. 1 - 5	26	21	0	43	4	0	47
2. 6 - 10	19	46	0	61	4	0	65
3. 11 - 15	3	5	0	8	0	0	8
4. 16 OR MORE	0	0	0	0	0	0	0
5. NO INDICATION	0	0	0	0	0	0	0

AREA 0

PART 03 08/75

SUMMARY FOR RUTGERS--THE STATE UNIVERSITY
NJ

DHEW-US OFFICE OF EDUCATION-BPE-DSSP
SPECIAL PROGRAMS BRANCH
YEAR-END REPORT FOR PROGRAM YEAR 1974-75
(REGULAR AND VETERAN STUDENTS)
DURING THE PERIOD 07/74 THRU 06/75

PART-3 FAMILY CHARACTERISTICS AND POVERTY CRITERIA BY ETHNO-RACIAL BACKGROUND	NEGRO	WHITE	INDIAN	ORI-ENTAL	MEXI-CAN AMER-ICAN	PUERTO RICAN	OTHER	NO INDIC.	TOTAL
TOTAL PARTICIPANTS	98	6	0	0	0	16	0	0	120
CURRENT STUDENTS	84	5	0	0	0	11	0	0	100
FORMER STUDENTS--NON-HIGH SCHOOL GRADUATES	4	1	0	0	0	3	0	0	8
FORMER STUDENTS--HIGH SCHOOL GRADUATES	10	0	0	0	0	2	0	0	12
A. POVERTY CRITERIA USED AT ADMISSION									
1. FAMILIES ON WELFARE OR ADC	36	5	0	0	0	7	0	0	48
2. RESIDENCE IN PUBLIC HOUSING	10	0	0	0	0	2	0	0	12
3. MISMANAGEMENT OF FAMILY INCOME	6	0	0	0	0	0	0	0	6
4. RESIDENCE IN INSTITUTION ETC.	0	0	0	0	0	0	0	0	0
5. TRANSFER FROM OTHER POVERTY PROGRAM	0	0	0	0	0	0	0	0	0
6. STUDENTS ADMITTED ON CALCULATED CRITERIA									
A. TOTAL MEETING LIST 'A' CRITERIA	23	1	0	0	0	3	0	0	27
B. ABOVE LIST 'A' BUT WITHIN LIST 'B' CRITERIA	5	0	0	0	0	1	0	0	6
C. INSUFFICIENT DATA TO CALCULATE TOTAL									
C1. LIST 'A' INDICATED	7	0	0	0	0	1	0	0	8
C2. LIST 'B' INDICATED	0	0	0	0	0	0	0	0	0
C3. NO INDICATION	0	0	0	0	0	0	0	0	0
D. TOTAL ABOVE LIST 'A' AND LIST 'B'									
D1. $0-499 ABOVE LIST 'B'	1	0	0	0	0	0	0	0	1
D2. $500 OR MORE ABOVE LIST 'B'	10	0	0	0	0	2	0	0	12
B. FAMILY SIZE									
1. 1 - 5	39	3	0	0	0	5	0	0	47
2. 6 - 10	52	3	0	0	0	10	0	0	65
3. 11 - 15	7	0	0	0	0	1	0	0	8
4. 16 OR MORE	0	0	0	0	0	0	0	0	0
5. NO INDICATION	0	0	0	0	0	0	0	0	0

AREA 0

PART 04 08/75

SUMMARY FOR RUTGERS--THE STATE UNIVERSITY
NJ

DHEW-US OFFICE OF EDUCATION-BPE-DSSSP
SPECIAL PROGRAMS BRANCH
YEAR-END REPORT FOR PROGRAM YEAR 1974-75
(REGULAR AND VETERAN STUDENTS)
DURING THE PERIOD 07/74 THRU 06/75

PART-4 CHARACTERISTICS OF UPWARD BOUND STUDENTS LEAVING PROGRAM PRIOR TO HIGH SCHOOL GRADUATION

	MALE	FEMALE	NEGRO	WHITE	INDIAN	ORI-ENTAL	MEXI-CAN AMERI-CAN	PUERTO RICAN	OTHER & NO INDIC.	TOTAL
TOTAL FORMER STUDENTS--NON-HIGH SCHOOL GRADUATES	6	2	4	1	0	0	0	3	0	8
A. CIRCUMSTANCES OF LEAVING										
1. DROPPED OUT OF SCHOOL	0	0	0	0	0	0	0	0	0	0
2. PERSONAL OR FAMILY PROBLEMS	2	2	2	1	0	0	0	1	0	4
3. FINANCIAL PROBLEMS	0	0	0	0	0	0	0	0	0	0
4. HEALTH PROBLEMS	0	0	0	0	0	0	0	0	0	0
5. DISAPPEARANCE	0	0	0	0	0	0	0	0	0	0
6. INVOLUNTARY DISMISSAL	3	0	1	0	0	0	0	0	0	3
7. FAMILY OR STUDENT MOVED AWAY	1	0	1	0	0	0	0	0	0	1
8. STUDENT DECEASED	0	0	0	0	0	0	0	0	0	0
9. PROJECT CLOSURE	0	0	0	0	0	0	0	0	0	0
B. LAST REPORTED GPA										
1. GPA = A	0	0	0	0	0	0	0	0	0	0
2. GPA = B	0	0	0	0	0	0	0	0	0	0
3. GPA = C	2	0	0	1	0	0	0	1	0	2
4. GPA = D	1	1	2	0	0	0	0	0	0	2
5. GPA = F	0	0	0	0	0	0	0	0	0	0
6. NO INDICATION OR NON-STANDARD SCALE	3	1	2	0	0	0	0	2	0	4
C. GRADE LEVEL AT DEPARTURE										
1. EIGHTH OR BELOW	0	0	0	0	0	0	0	0	0	0
2. NINTH	0	1	1	0	0	0	0	0	0	1
3. TENTH	5	0	2	1	0	0	0	2	0	5

(continued)

	MALE	FEMALE	NEGRO	WHITE	INDIAN	ORI-ENTAL	MEXI-CAN AMERI-CAN	PUERTO RICAN	OTHER & NO INDIC.	TOTAL
4. ELEVENTH	0	1	1	0	0	0	0	0	0	1
5. TWELFTH	1	0	0	0	0	0	0	1	0	1
6. NO INDICATION	0	0	0	0	0	0	0	0	0	0
D. PERIOD IN UPWARD BOUND										
1. 6 MONTHS OR LESS	3	0	1	1	0	0	0	1	0	3
2. 7-12 MONTHS	1	1	1	0	0	0	0	1	0	2
3. 13-24 MONTHS	2	1	2	0	0	0	0	1	0	3
4. 25-36 MONTHS	0	0	0	0	0	0	0	0	0	0
5. 37-48 MONTHS	0	0	0	0	0	0	0	0	0	0
6. 49-60 MONTHS	0	0	0	0	0	0	0	0	0	0
7. OVER 60 MONTHS	0	0	0	0	0	0	0	0	0	0
8. NO INDICATION	0	0	0	0	0	0	0	0	0	0
E. LAST REPORTED EDUCATIONAL STATUS										
1. HIGH SCHOOL	5	1	2	1	0	0	0	3	0	6
2. VOCATIONAL/TECHNICAL	0	0	0	0	0	0	0	0	0	0
3. PREPARATORY SCHOOL	0	0	0	0	0	0	0	0	0	0
4. 2 OR 4 YEAR COLLEGE	0	0	0	0	0	0	0	0	0	0
5. NOT ENROLLED ANYWHERE	1	1	2	0	0	0	0	0	0	2
6. STATUS UNKNOWN	1	1	2	0	0	0	0	0	0	2

AREA 0 PART 05 08/75

SUMMARY FOR RUTGERS--THE STATE UNIVERSITY
NJ

PART-5 CHARACTERISTICS OF UPWARD BOUND STUDENTS
LEAVING PROGRAM AFTER HIGH SCHOOL GRADUATION

DHEW-US OFFICE OF EDUCATION-BPE-DSSSP
SPECIAL PROGRAMS BRANCH
YEAR-END REPORT FOR PROGRAM YEAR 1974-75
(REGULAR AND VETERAN STUDENTS)
DURING THE PERIOD 07/74 THRU 06/75

	2 YEAR COLLEGE	4 YEAR COLLEGE	NOT COLLEGE	SUMMER BRIDGE	OTHER BRIDGE	TOTAL BRIDGE
TOTAL FORMER STUDENTS--HIGH SCHOOL GRADUATES	0	10	2	9	3	12
A. SEX						
1. MALES	0	3	1	4	0	4
2. FEMALES	0	7	1	5	3	8
3. NO INDICATION	0	0	0	0	0	0
B. ETHNO-RACIAL CHARACTERISTICS						
1. NEGRO	0	8	2	9	1	10
2. WHITE	0	0	0	0	0	0
3. AMERICAN INDIAN	0	0	0	0	0	0
4. ORIENTAL	0	0	0	0	0	0
5. MEXICAN AMERICAN	0	0	0	0	0	0
6. PUERTO RICAN	0	2	0	0	2	2
7. OTHER	0	0	0	0	0	0
8. NO INDICATION	0	0	0	0	0	0
C. PERIOD IN UPWARD BOUND						
1. 1 YEAR OR LESS	0	0	0	0	0	0
2. 1-2 YEARS	0	1	0	1	0	1
3. 2-3 YEARS	0	7	1	6	2	8
4. 3-4 YEARS	0	2	1	2	1	3
5. 4-5 YEARS	0	0	0	0	0	0
6. 5 OR MORE YEARS	0	0	0	0	0	0
7. NO INDICATION	0	0	0	0	0	0
D. LAST REPORTED GPA						
1. GPA = A	0	0	0	0	0	0

(continued)

PART 05 (continued)

	2 YEAR COLLEGE	4 YEAR COLLEGE	NOT COLLEGE	SUMMER BRIDGE	OTHER BRIDGE	TOTAL BRIDGE
2. GPA = B	0	0	0	0	0	0
3. GPA = C	0	0	0	0	0	0
4. GPA = D	0	0	0	0	0	0
5. GPA = F	0	0	0	0	0	0
6. NO INDICATION	0	10	2	9	3	12
E. LAST REPORTED POST-SECONDARY STATUS						
1. 2-YEAR COLLEGE	0	0	0	0	0	0
2. 4-YEAR COLLEGE	0	10	0	8	2	10
3. HOSPITAL CONNECTED OR NURSING	0	0	0	0	0	0
4. VOCATIONAL/TECHNICAL SCHOOL	0	0	1	1	0	1
5. TRANSITION YEAR PROGRAM	0	0	0	0	0	0
6. NOT ENROLLED ANYWHERE	0	0	0	0	0	0
7. STATUS UNKNOWN OR NO INDICATION	0	0	0	0	0	0
8. GRADUATE OR POST-GRADUATE STUDY	0	0	0	0	0	0
F. ENROLLED AT						
1. OWN HOST INSTITUTION	0	0	0	0	0	0
2. OTHER UPWARD BOUND HOST INSTITUTION	0	2	0	2	0	2
3. NON-HOST INSTITUTION	0	8	0	6	2	8
4. NOT ENROLLED	0	0	2	1	1	2

APPENDIX H

RUTGERS UPWARD BOUND COURSE

REGISTRATION PROCEDURE, 1969

1. All registration activities will take place in the Lounge area of Neilson Dining Hall.

2. Please note the area with the department and courses in which you are interested.

3. Choose courses you wish to take (note required courses).

   A. Juniors (new students)
      (1) All juniors must register for a section of
          (a) English II (Sections 1, 2, or 3)
          (b) One section of Typing
          (c) One section of Introduction to Psychology

B. Seniors
(1) All seniors must register for one section of English III (Sections 1, 2, or 3) and one section of
(2) Introduction to Psychology

C. Bridge Student Program
All Bridge students must register for a section of each
(a) College Composition
(b) College Mathematics
(c) College Orientation (hours to be arranged)

D. All students will register at least 3 majors and 2 electives.

4. If you have failed an academic major, in public school, and it is offered, you must sign up for this course so that you may remove this failure.

5. You will fill out three class slips for each course for which you register. These slips are to be given to the advisor who is registering you for the course. It is not necessary for you to retain any of these forms at this time. You will receive your class slips on Sunday, June 29, 1969.

6. Registration for special courses, activities, and projects will take place on Monday afternoon, June 30, 1969.

PROCEDURES

	Junior Students	Senior Students	Bridge Students
1.	Register for English	Register for English	Register for English, Math
2.	Register for Typing	Register for Psychology	Register for Other courses

	Junior Students	Senior Students	Bridge Students
3.	Register for Psychology	Rooming forms	Register for college orientation
4.	Blazer measurements	Register for Other courses	Rooming forms
5.	Your campus rooming forms	Check with assigned advisor and turn in class schedule	Check with assigned advisor and turn in class schedule
6.	Register for Other courses		
7.	Check with assigned advisor and turn in class schedule		

Note: All students are to have their pictures taken.

APPENDIX I

RUTGERS UPWARD BOUND COURSE

OFFERINGS, SUMMER 1969

Course	Section	Day and Period	Room	Instructor
		Mathematics		
Algebra I	#1	M W F 1 1 1		Bert Green
Algebra I	#2	M W F 2 2 2		Bert Green
Algebra I	#3	M W F 3 3 3		Henry Eng
Algebra II	#1	M W F 1 1 1		Henry Eng
Algebra II	#2	M W F 3 3 3		Henry Eng
Algebra II	#3	T Th S 3 3 3		Henry Eng

Course	Section	Day and Period	Room	Instructor
Pre-Algebra and General Math	#1	T Th S 1 1 1		Ron Horowitz
Pre-Algebra and General Math	#2	T Th S 2 2 2		Henry Eng
Plane Geometry	#1	M W F 2 2 2		Bert Green
Plane Geometry	#2	T Th S 1 1 1		Bert Green
Introduction to College Math	#1	M W F 1 1 1		Ron Horowitz
Introduction to College Math	#2	T Th S 2 2 2		Ron Horowitz
NOTE: All Bridge Students must register for a section of Introduction to College Mathematics.				
Introduction to Calculus		Hours to be arranged.		Ron Horowitz

Communications

English II	#1	M W F 1 1 1		Sam Black
English II	#2	M Th M Th 5 5 6 6		Sam Black
English II	#3	T Th T Th 2 2 3 3		Sam Black

Course	Section	Day and Period	Room	Instructor
NOTE: All (new) junior students must register for a section of English II.				
English III	#1	T F T F 4 4 5 5		Elizabeth Stambolian
English III	#2	M W F 2 2 2		Elizabeth Stambolian
English III	#3	M Th M Th 4 4 5 5		Elizabeth Stambolian
NOTE: All (second year) senior students must register for a section of English III.				
English IV		Hours to be arranged		Ed Faltisco
College Composition and English	#1	M W F 3 3 3		Barbara Munson
College Composition and English	#2	M W F 2 2 2		Barbara Munson
NOTE: All Bridge students must register for a section of College Composition and English.				
Speed Reading and Study Skills		MM T Th FF 45 4 4 46		Marcia Smolens
NOTE: Students may register for three, four, five, or six periods of Speed Reading and Study Skills.				
The Short Story	#1	M Th 4 4		Barbara Munson

Course	Section	Day and Period	Room	Instructor
The Short Story	#2	T F 4 4		Barbara Munson
Interpreting Modern Literature and Poetry	#1	T Th S 3 3 3		Barbara Munson
Interpreting Modern Literature and Poetry	#2	T Th S 1 1 1		Barbara Munson
Public Speaking or Dramatics		MM TT ThTh FF 45 45 4 5 45		Ed Faltisco
NOTE: Students may register for two, three, four, five, six, seven, or eight periods of Public Speaking or Dramatics.				
Introduction to Journalism	#1	M T Th F 6 6 6 6		Ed Faltisco
Advanced Journalism	#2	M T Th F 6 6 6 6		Ed Faltisco
NOTE: Students may register for two, three, or four periods of Journalism.				
Typing	#1	M W F 3 3 3		Kathy McAndrew
Typing	#2	M T Th 4 4 4		Kathy McAndrew
Typing	#3	T Th F 5 5 5		Kathy McAndrew
Typing	#4	M T Th 6 6 6		Kathy McAndrew

Course	Section	Day and Period	Room	Instructor
NOTE: All (new) junior students must register for a section of Typing.				
		Foreign Languages		
French I		T Th S 2 2 2		Liz Malbom
French II		T Th S 1 1 1		Liz Malbom
French III or IV Advanced Seminar	Hours to be arranged.			Liz Malbom Gail McHugh
Spanish I	#1	M W F 2 2 2		Liz Malbom Gail McHugh
Spanish I	#2	T Th S 3 3 3		Liz Malbom
Spanish II	#1	T Th S 3 3 3		Joyce Mitchell
Spanish II	#2	M W F 2 2 2		Joyce Mitchell
Spanish III or IV Advanced Seminar		T Th S 1 1 1		Joyce Mitchell
Beginning Italian	Hours to be arranged.			Joyce Mitchell
Beginning Russian	Hours to be arranged.			Joyce Mitchell

Course	Section	Day and Period	Room	Instructor
Biology	#1	M W F 1 1 1		Jay Kopko
Biology	#2	T Th S 3 3 3		Jay Kopko
Chemistry	#1	T Th S 2 2 2		Jay Kopko
Chemistry	#2	M W F 2 2 2		Jay Kopko
Physics		M W F 3 3 3		Mickey Kott
		Social Sciences		
U. S. History I	#1	M W F 2 2 2		Tom Powell
U. S. History I	#2	M W F 3 3 3		Tom Powell
U. S. History I	#3	T Th S 1 1 1		Walter Elder
U. S. History II	#1	M W F 3 3 3		Marcia Smolens
U. S. History II	#2	T Th S 3 3 3		Marcia Smolens

Course	Section	Day and Period	Room	Instructor
Economics	#1	M W F 2 2 2		Walter Elder
Economics	#2	T Th S 2 2 2		Walter Elder
Black History and Culture	#1	T Th S 5 5 5		Walter Elder
Black History and Culture	#2	M T Th 6 6 6		Walter Elder
Sociology		T Th S 1 1 1		Marcia Smolens
Community Leadership Training Program (Constitution, Judicial, Legislative Systems and Processes and Minority Rights)	#1	M T Th		Tom Powell
Community Leadership Training Program	#2	T Th F 5 5 5		Tom Powell
Community Leadership Training Program	#3	T Th S 1 1 1		Tom Powell
Introduction to Psychology	#1	M 4		Sol Gordon

Course	Section	Day and Period	Room	Instructor
Introduction to Psychology	#2	T 4		Sol Gordon
Introduction to Psychology	#3	Th 4		Sol Gordon
Introduction to Psychology	#4	[illegible] 4		Sol Gordon
NOTE: All (new) junior students must register for a section of Introduction to Pshchology.				
College Orientation		Hours to be arranged.		Sol Gordon
NOTE: All Bridge students must register for College Orientation.				

Creative and Performing Arts

Introduction to Photography		M T Th F 6 6 6 6		Ron Horowitz Jay Kopko Mickey Kott
Advanced Photography and Film Production		M T Th F 6 6 6 6		Ron Horowitz Jay Kopko Mickey Kott
NOTE: Students may register for two, three, or four periods of either photography course.				
Modern Dance		T F 6 6,7		Joyce Mitchell Hy Evans

Course	Section	Day and Period	Room	Instructor
Painting and Drawing	#1	T T 4 5		Debbie Saltzman
Painting and Drawing	#2	T T 5 6		Debbie Saltzman
Design Poster, Textile and Silk Screen	#1	M M 4 5		Debbie Saltzman
Design Poster, Textile and Silk Screen	#2	M M 5 6		Debbie Saltzman
Sculpture	#1	F F 5 6		Debbie Saltzman

Health and Physical Education

Seminar and Practicum for Prospective Health and Nursing Students	Hours to be arranged	Sylvia Barner
Swimming (Beginning)	M T W Th F 3 3 3 3 3	Bob Williams Hy Evans
Swimming (Advanced)	M T W Th F 3 3 3 3 3	Bob Williams Hy Evans
Swimming (Recreational)	M T W Th F 3 3 3 3 3	Bob Williams Hy Evans

Course	Section	Day and Period	Room	Instructor
Conditioning and Slimnastics		M T Th F 1 pm to 2:20 pm		Bob Williams Hy Evans
Open Gym		M T Th F 1 pm to 2:20 pm		Bob Williams Hy Evans
Co-Ed Sports and Games	#1	T T 5 6		Bob Williams Hy Evans
Co-Ed Sports and Games	#2	Th Th 5 6		Bob Williams Hy Evans
Beginning and Advanced Sports				
Football	Hours to be arranged			Staff
Basketball	" " "	"		"
Track	" " "	"		"
Wrestling	" " "	"		"
Baseball	" " "	"		"
Tumbling	" " "	"		"
Soccer	" " "	"		"
Golf	" " "	"		"
Archery	" " "	"		"
Table Tennis	" " "	"		"
Self-Defense	" " "	"		"
Other	" " "	"		"

APPENDIX J

RUTGERS UPWARD BOUND FILM PROGRAM

SUMMER 1969

1. Different Aspects of the Program

Films will figure in the project in four ways:

(a) Feature films will be shown on Fridays and Sundays. In the evening.

(b) Various short films will be available each week for staff to use as they see fit in the regular class time.

(c) On two Wednesdays there will be a Film Festival during the afternoon; films on

Black history and culture will be shown to everyone at the same time, followed by discussion in small groups.

(d) A serial in 12 parts will be shown at regular intervals. Staff can use this in any way they like, but one obvious topic for discussion would be mass media programs.

2. Feature Films

The films were chosen according to three main criteria: (1) to find films that were at once entertaining and worthwhile enough to warrant detailed discussion; (2) to create a program that was varied--i.e., including films of different kinds, moods, and even some suitable "classics"--the Bogart and Chaplin movies; (3) to find themes that would be related to the two main themes of the short films (see section on short films) so as to provide a minimum of continuity for the film work as a whole, despite lapses of time between viewings, and between viewings and discussions in the case of the feature films.

The following films will be shown:

June 29--Saturday Night and Sunday Morning--City Theme

Examine British working-class life by following the doings of a lively young factory worker--played by Albert Finney. The hero doubts he can preserve his identity in marriage, but an affair ends badly and he decides to marry his girlfriend.

June 4--The Asphalt Jungle--City Theme

Though dating back to the 'fifties, the film raises relevant problems in its exciting treatment of a big city jewel robbery.

July 6--Edge of the City--City Theme

The film is again dated stylistically, but is an excellent study of the way racial

tensions can suddenly erupt in violence. The setting is a dockyard, and the main characters are played by Cassavetes and Sidney Poitier.

July 11--Compulsion

Two young men plan and carry out a murder successfully. The film, based on a real case, studies the way the attorney manages to free the boys of the charge.

July 13--Nothing but the Best

A witty comedy satirizing status, sex and murder by following the doings of a cheeky young Britisher elbowing his way to the top.

July 18--All the King's Men--Conflict Theme

About a ruthless, power grabbing governor and the political machine be built. Made in 1949, the film deals with the perennial problem of political corruption.

July 20--The Treasure of Sierra Madre--Conflict Theme

Classic Bogart movie about the influence of greed on the character of a man. The struggle between three prospectors in Mexico after they have enough gold for all, show the way greed can distort and destroy human relationships.

July 25--The Guns of Navarone--Conflict Theme

Large-scale war adventures showing the heroism of commandos who destroy a Nazi camp on a Greek island. Gregory Peck, color.

July 27--The Lord of the Flies

A group of well-mannered English school boys are evacuated by plane from London as another war threatens. Their plane crashes en route and they are left to survive, without any adult help, on an uninhabited island. Desperate for survival, they become savages, until a rescue party finds them and they revert

again to being normal children (Continental Film).

August 1--Rebel Without a Cause

Made in 1955, the film studies what has become an increasing problem--the alienation of young people from adult society. James Dean plays the young hero who is misunderstood by his parents and involved in a violent confrontation with the gang leader at his school. The film has many faults, but should provoke discussion.

August 3--Chaplin Festival

A series of Chaplin films which students will hopefully find amusing.

3. Short Films

The films have been chosen mainly in accordance with two themes broad enough to allow for discussion of several different topics while enabling film work as a whole to be focused and coherent in a way that would be impossible were numerous subjects presented. Individual instructors will of course handle the material from their own perspective and discussion may range far from the film itself. Nevertheless, if instructors so wish, discussion of one of one film may be carred over into discussion of following films through the thematic link. In this way, one broad topic--in all its various aspects--may be studied in some depth and students feel that they have learned something through the film work.

The two main themes are (1) Cities, (2) Conflict. Some relevant questions that arise out of the material are listed below, but it is important to note that film work is not merely a stimulating way of getting discussions going. Short film of this kind--i.e., creative, individual visions rather than conventional documentaries--provide an opportunity for encouraging a critical approach to things seen. Questions about the way the film was made will help students realize that each director selected what to show and what to leave out in order to present a specific point of view. Students need to examine the validity

of each perspective and the effectiveness of the director's method of presenting his material. Neither students nor instructors may agree with the view of the film, but the debate itself encourages students to sort out their own values.

(1) Cities

This is an enormous topic and could lead to various kinds of studies. The films could be backed up be different sorts of material (stories, newspaper articles, maps, etc.) and by visits.

I. What sort of a physical environment does a city provide?

(a) Lewis Mumford's "The City as Man's Home"--28 mins.

Deals with the deterioration of communal standards of living as personal standards rise. Introduces whole questions of the city as a place to live in.

(b) "My Own Yard to Plan In"--10 mins.

Cameras record children amusing themselves in a crowded city area, and in so doing, comment on the city as a place to grow up in.

1. How could the physical environment be improved? What do people need for a physical environment in order to develop fully?

2. What sort of cultural environment does a city provide? Who do people spend their leisure time? What opportunities for creativity exist?

(a) "Lonely Boy"--30 mins.

Traces the career of Paul Anka and in so doing raises the entire question of pop stars, fan worship, and mass hysteria as entertainment.

(b) "Garbage"--12 mins.

A controversial look at city life and culture--garbage and the media focused on.

What leisure-time activities should exist in a city?

3. What different groups make up a city? Are there tensions between groups? Why do these people live in a city? How is a city run? What possibilities for improvement exist?

(a) "The Troublemakers"--30 mins.

A group of organizers try various methods to bring about changes in the living conditions in Newark. The film examines problems of organizing and raises the question of the involvement of people in running the city they live in.

(2) Science and the Future

1. What should the ideal city look like? What environment would you choose for your children--if choice were possible?

2. What implications for men's lives in the future do scientific and technological developments have?

(a) "The Living Machine"--(in two parts)--50 mins.

Deals with the effect of technology on man's life. The creation of artificial intelligence may radically change the way men live.

(b) "The Silent Spring"--Rachel Carson--54 mins.

Examines the disastrous effect man's use of insecticides may ultimately have on plant life and thus on man's life. By

interfering in the processes of nature, man may entirely upset the balance of things in nature.

(3) Conflict

This theme--deliberately abstract and general as it stands--needs to be made meaningful by raising concrete situations. One might begin with the violence students see going on around them in their daily lives and proceed to the larger kinds of violence, such as war.

1. Think of violent situations you have either witnessed or participated in. How did the violence come about? How could the situation have been handled so as to avoid violence?

(a) "Neighbors"--10 mins.
An animated satire on violence and its logical conclusion.

2. What do you know about the last world war?

(a) "Night and Fog"--30 mins.

Alain Resnais visits the empty Nazi camps and through still and newsreel recreates camp life in all its sordidness and violence. The film suggests that men forget their potentiality for violence too quickly.

3. What would a Third World War be like?

(a) "The Hole"--10 mins.

An animated satire on nuclear war.

August 4th

1. Is heroism relevant today? How do you feel about dying for (a) your own cause? (b) a cause that your country imposes on you?

(a) "Occurrence at Owl Creek Bridge"--27 mins.

Based on the story by Ambrose Pierce, the film recreates the atmosphere of the American Civil War around the drama of a man about to die who is suddenly saved.

2. Conflict within the city. Why do people in a city and the police often fail to see eye to eye? What different values on each side cause conflicts to emerge? Do the police always enjoy their tasks? What conflicts must policemen often have?

(a) "Sunday"--16 mins.

The police move in on a folk-singing group in Greenwich Village.

4. The Film Festival

The entire Film Festival Program--two Wednesday afternoons--will concentrate on problems of Black history and culture. The two documentaries were originally shown on television.

July 7--"Black History"

July 23--"Portrait in Black and White"

All students will view the films together and form small discussion groups afterwards.

5. Film Serials

King of the Rocket Men, in twelve episodes, will be shown at regular intervals. These film serials go back to early movie days, but the format is the same as current television serials. Besides being entertaining, the serial should lead to questions about the stereotyped characters.